

*Jan Delaval please*

Access DB# 87533

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: SABITA GAZI Examiner # 74141 Date: 2/25/03  
 Art Unit: 1616 Phone Number 305-3916 Serial Number: 08/890-225  
 Mail Box and Bldg/Room Location: 2019, 3807 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need. *ME*

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: N<sub>2</sub> - Phenylamide derivatives

Inventors (please provide full names): Mark David Charles et al.

Earliest Priority Filing Date: 2/4/2000, WO 00/46184

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*Please search for Compounds of Cl 29, 42, 43 & 45*

*Please search see attached sheets*

*Thank you*

Jan Delaval  
 Reference Librarian  
 Biotechnology & Chemical Library  
 CM1.1E07 - 703-308-4498  
 jan.delaval@uspto.gov

## STAFF USE ONLY

Searcher: [Signature]  
 Searcher Phone #: 4498  
 Searcher Location: \_\_\_\_\_  
 Date Searcher Picked Up: 3/13/03  
 Date Completed: 3/13/03  
 Searcher Prep & Review Time: \_\_\_\_\_  
 Clerical Prep Time: 75  
 Online Time: 20

## Type of Search

NA Sequence (#) \_\_\_\_\_  
 AA Sequence (#) \_\_\_\_\_  
 Structure (#) ✓  
 Bibliographic \_\_\_\_\_  
 Litigation \_\_\_\_\_  
 Fulltext \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors and cost where applicable

STN ✓  
 Dialog \_\_\_\_\_  
 Questel/Orbit \_\_\_\_\_  
 Dr. Link \_\_\_\_\_  
 Lexis/Nexis \_\_\_\_\_  
 Sequence Systems \_\_\_\_\_  
 WWW/Internet \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

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(FILE 'HOME' ENTERED AT 14:45:24 ON 13 MAR 2003)  
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 14:45:35 ON 13 MAR 2003

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E WO2000-GB345/AP, PRN  
L2 1 S E3, E4  
E WO200046184/PN  
L3 1 S E3  
L4 1 S L1-L3  
E CHARLES, M  
E CHARLES M/AU  
L5 59 S E3, E9, E29  
E FRANKE W/AU  
L6 264 S E3-E11, E25, E26  
E GREEN D/AU  
L7 349 S E3, E8-E10  
E GREEN DAVE/AU  
L8 254 S E4, E16-E19  
E HOUGH T/AU  
L9 23 S E3, E4, E11, E13, E14  
E MITCHELL D/AU  
L10 182 S E3, E19-E21  
L11 7 S E30-E32  
E SIMPSON D/AU  
L12 124 S E3, E14  
E SIMPSON DON/AU  
L13 13 S E4, E8, E9  
E ATHERALL J/AU  
L14 3 S E4, E5  
E AVEBTUS.OAMCS  
E AVENTIS/PA, CS  
L15 1597 S AVENTIS?/PA, CS  
L16 1 S L4 AND L5-L15  
SEL RN

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Biotechnology & Chemical Library  
CM1 1E07 - 703-308-4498  
jan.delaval@uspto.gov

FILE 'REGISTRY' ENTERED AT 14:50:24 ON 13 MAR 2003

L17 448 S E1-E448  
L18 106 S L17 NOT METHANIMIDAMIDE  
L19 STR  
L20 SCR 1839  
L21 50 S L19 AND L20  
L22 30727 S L19 AND L20 FUL  
SAV TEMP L22 QAZI890/A  
L23 STR L19  
L24 383 S L17 AND L22  
L25 65 S L17 NOT L24  
L26 48 S L25 AND NR>=2  
L27 23 S L26 NOT METHANIMIDAMIDE  
L28 3 S L27 AND (C22H30N2O OR C21H28N2O OR C20H22N4OS)  
L29 25 S L26 NOT L27  
L30 411 S L24, L28, L29  
L31 37 S L17 NOT L30  
SAV TEMP L30 QAZI890A/A

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L32 1 S L30

FILE 'USPATFULL, USPAT2' ENTERED AT 15:12:35 ON 13 MAR 2003

L33 0 S L30

FILE 'REGISTRY' ENTERED AT 15:12:44 ON 13 MAR 2003

L34 30344 S L22 NOT L17  
L35 STR L23  
L36 50 S L35 SAM SUB=L34

FILE 'HCAPLUS' ENTERED AT 15:16:35 ON 13 MAR 2003

L37 2642 S L34  
L38 2419 S L37 AND (PD<=20000204 OR PRD<=20000204 OR AD<=20000204)  
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L40 1076 S L37 AND AGRO?/SC,SX AND L38  
E FUNGICIDE/CT  
L41 194 S E17 AND L38  
E E5+ALL  
L42 130 S E8+NT AND L38  
L43 3749 S (ERYSIPH? OR "E") ( )GRAMIN? OR TRITICI?  
E ERYSHIPHE/CT  
L44 1059 S E25-E32  
E E25+ALL  
L45 1059 S E6+NT  
E E4+ALL  
L46 2689 S E4+NT  
L47 23 S L38 AND L43-L46  
L48 23 S L39,L40 AND L47  
L49 23 S L40 AND L47  
L50 23 S L48,L49  
L51 13 S L50 NOT MIX?  
L52 10 S L50 NOT L51  
L53 5 S L52 NOT SYNERG?  
L54 13 S L51 NOT SYNERG?  
L55 18 S L53,L54  
L56 868 S L38 AND P/DT  
L57 502 S L56 AND L39-L46  
L58 278 S L57 NOT (SYNERG? OR MIX?)  
L59 272 S L58 NOT GENET?/SC,SX  
L60 140 S L59 AND (US/PC OR US/PRC OR US/AC)  
L61 130 S L60 AND US/PC  
L62 25 S L60 AND L41,L42  
L63 23 S L62 AND 5/SC,SX  
L64 41 S L55,L63 AND L37-L63  
L65 28 S L64 AND P/DT  
L66 13 S L64 NOT L65  
L67 40 S BENZEN?/SC,SX AND L56  
L68 15 S L67 AND L39-L46  
L69 1076 S L38 AND 5/SC,SX  
L70 205 S L39,L40,L69 AND L41-L46  
L71 131 S L70 NOT (SYNERG? OR MIX?)  
L72 131 S L71 NOT GENET?/SC,SX  
L73 49 S L72 AND P/DT  
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 15:30:19 ON 13 MAR 2003

L74 723 S E1-E723  
L75 4278 S L35 FUL SUB=L34  
SAV L75 QAZI890B/A  
L76 0 S L74 AND L75

FILE 'HCAPLUS' ENTERED AT 15:33:37 ON 13 MAR 2003

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L80 43 S L75 (L) AGR/RL  
L81 41 S L78 AND L80

L82 0 S L78 AND L43-L46  
L83 1 S L78 AND ?FUNG?  
L84 43 S L80,L81  
L85 42 S L84 NOT (PHARMACOL? OR PHARMACEUT?)/SC,SX  
SEL HIT RN  
DEL SEL  
SEL HIT RN

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L86 605 S E1-E605

=> fil reg  
FILE 'REGISTRY' ENTERED AT 15:38:13 ON 13 MAR 2003  
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Property values tagged with IC are from the ZIC/VINITI data file  
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STRUCTURE FILE UPDATES: 12 MAR 2003 HIGHEST RN 498527-50-7  
DICTIONARY FILE UPDATES: 12 MAR 2003 HIGHEST RN 498527-50-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

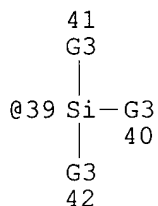
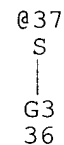
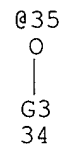
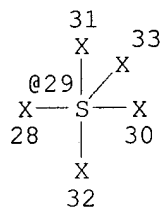
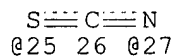
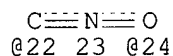
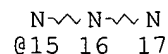
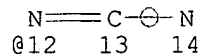
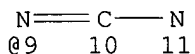
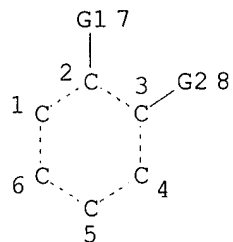
Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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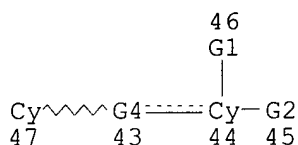
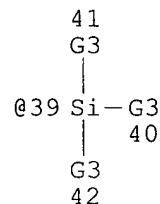
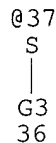
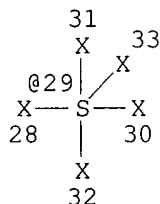
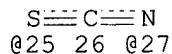
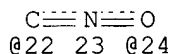
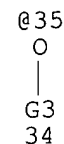
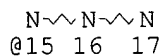
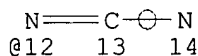
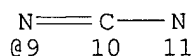
L19



VAR G1=9/12  
VAR G2=AK/CY/OH/SH/15/NO2/X/CN/19/NH2/N/22/25/24/27/29/35/37/39  
VAR G3=AK/CY  
NODE ATTRIBUTES:  
NSPEC IS RC AT 11  
NSPEC IS RC AT 14  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE  
L20 SCR 1839  
L22 30727 SEA FILE=REGISTRY SSS FUL L19 AND L20  
L34 30344 SEA FILE=REGISTRY ABB=ON PLU=ON L22 NOT L17  
L35 STR



A @48

VAR G1=9/12  
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 VAR G3=AK/CY  
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE  
 L75 4278 SEA FILE=REGISTRY SUB=L34 SSS FUL L35

100.0% PROCESSED 30344 ITERATIONS  
 SEARCH TIME: 00.00.07

4278 ANSWERS

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FILE COVERS 1907 - 13 Mar 2003 VOL 138 ISS 11  
 FILE LAST UPDATED: 12 Mar 2003 (20030312/ED)

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

=> s 132 and 11-116

L87 1 L32 AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR  
 L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR L16)

=> d all fhitstr

L87 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:553541 HCAPLUS

DN 133:163952

TI Preparation of N2-phenylamidines as fungicides

IN Charles, Mark David; Franke, Wilfried; Green,  
 David Eric; Hough, Thomas Lawley; Mitchell, Dale  
 Robert; Simpson, Donald James; Atherall, John  
 Frederick

PA Hoechst Schering Agrevo G.m.b.H., Germany

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA English

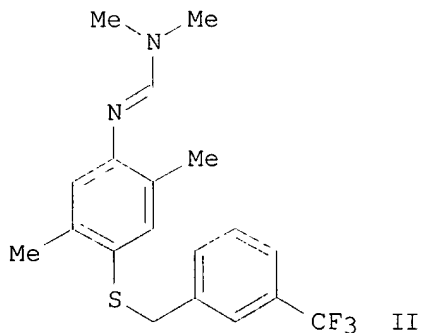
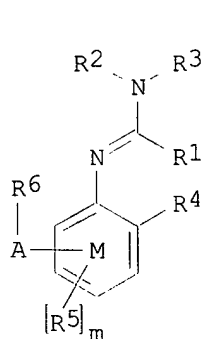
IC ICM C07C233-37

ICS C07D333-58; C07D285-00; C07D273-00; C07C251-04; A01N037-52;  
 A01N043-82

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000046184	A1	20000810	WO 2000-GB345	20000204 <--
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	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2360943	AA	20000810	CA 2000-2360943	20000204 <--
	EP 1150944	A1	20011107	EP 2000-901791	20000204 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
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	JP 2002536354	T2	20021029	JP 2000-597256	20000204 <--
PRAI	GB 1999-2592	A	19990206	<--	
	WO 2000-GB345	W	20000204	<--	
OS	MARPAT 133:163952				
GI					



AB The title compds. [I; R1 = alkyl, alkenyl, alkynyl, etc.; R2, R3 = R1, CN, acyl, etc.; R2 and R3, or R2 and R1, together with their interconnecting atoms may form (un)substituted ring; R4 = alkyl, alkenyl, alkynyl, etc.; m = 0-3; when present R5 = R4; R6 = (un)substituted carbo- or heterocyclyl; A = a direct bond, O, C.tplbond.C, etc.; AR6 and R5 together with benzene ring M form an (un)substituted fused ring system], useful as fungicides, were prepd. E.g., a 3-step prepn. of the formamidine II which showed moderate to total control against Erysiphe graminis f. sp. Tritici at 500 ppm (w/v) or less, was given.

ST phenylamidine prepn fungicide agrochem

IT Fungicides  
(agrochem.; prepn. of N2-phenylamidines as fungicides)

IT 287937-99-9P 287938-41-4P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of N2-phenylamidines as fungicides)

IT 287938-00-5P 287938-01-6P 287938-02-7P  
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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of N2-phenylamidines as fungicides)

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 287944-22-3P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of N2-phenylamidines as fungicides)

IT 85-44-9, 1,3-Isobenzofurandione 98-17-9, 3-Trifluoromethylphenol  
 122-01-0, 4-Chlorobenzoyl chloride 403-43-0, 4-Fluorobenzoyl chloride  
 617-84-5, N,N-Diethylformamide 624-78-2, Methylethylamine 3096-71-7,  
 4-Amino-2,5-dimethylphenol 3282-30-2, Pivaloyl chloride 4637-24-5  
 6393-01-7 25697-55-6 34633-69-7 72198-83-5 96784-54-2,  
 3-Methyl-4-nitrobenzonitrile 98054-21-8 287942-23-8 287942-24-9  
 287942-25-0 287942-26-1 287942-27-2 287942-29-4 287942-30-7  
 287942-31-8 287942-32-9 287942-33-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of N2-phenylamidines as fungicides)

IT 287942-11-4P 287942-13-6P 287942-14-7P 287942-16-9P 287942-18-1P  
 287942-19-2P 287942-21-6P 287942-28-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of N2-phenylamidines as fungicides)

IT 51366-39-3P 287942-17-0P 287942-20-5P 287942-22-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of N2-phenylamidines as fungicides)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

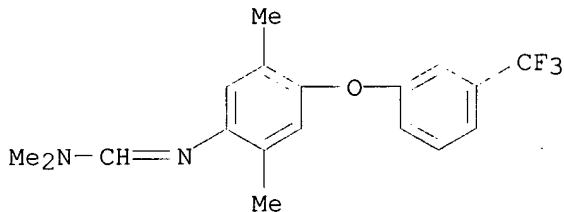
- (1) Bayer Ag; WO 9522532 A 1995 HCAPLUS
- (2) Duerr, D; US 3284289 A 1966 HCAPLUS
- (3) Duerr, D; US 4209319 A 1980 HCAPLUS
- (4) Hokko Chem Ind Co; EP 0429281 A 1991 HCAPLUS

IT 287937-99-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of N2-phenylamidines as fungicides)

RN 287937-99-9 HCAPLUS

CN Methanimidamide, N'-[2,5-dimethyl-4-[3-(trifluoromethyl)phenoxy]phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



=&gt; fil reg

FILE 'REGISTRY' ENTERED AT 15:38:58 ON 13 MAR 2003

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STRUCTURE FILE UPDATES: 12 MAR 2003 HIGHEST RN 498527-50-7

DICTIONARY FILE UPDATES: 12 MAR 2003 HIGHEST RN 498527-50-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

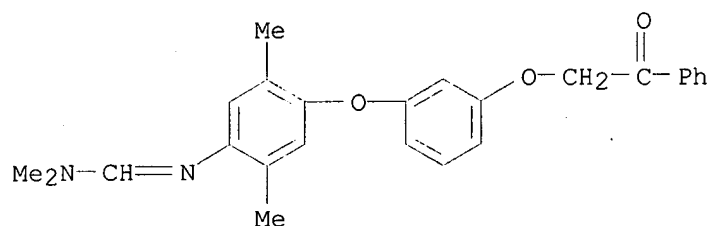
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Methanimidamide, N'-[2,5-dimethyl-4-[3-(2-oxo-2-phenylethoxy)phenoxy]phenyl]-N,N-dimethyl- (9CI)

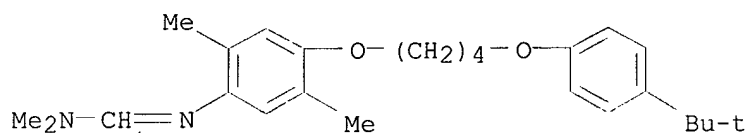
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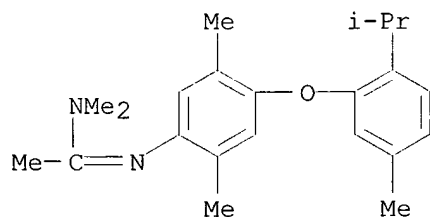
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
 IN Methanimidamide, N'-[4-[4-(1,1-dimethylethyl)phenoxy]butoxy]-2,5-dimethylphenyl]-N,N-dimethyl- (9CI)  
 MF C25 H36 N2 O2



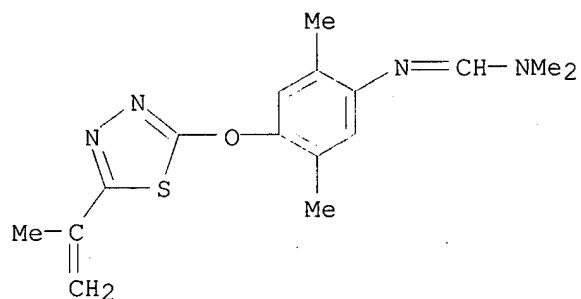
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C22 H30 N2 O



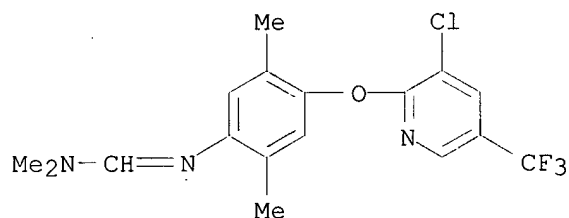
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C16 H20 N4 O S



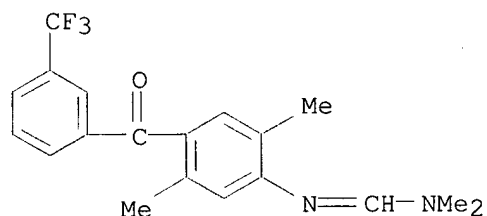
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C17 H17 Cl F3 N3 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

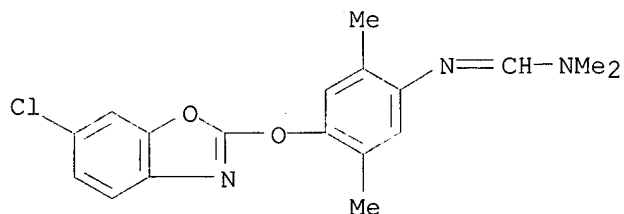
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 MF C19 H19 F3 N2 O



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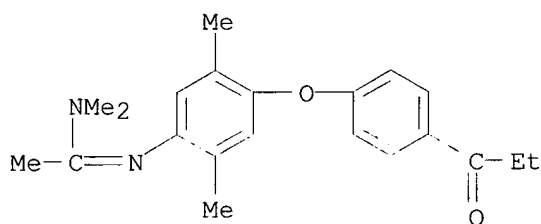
L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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MF C18 H18 Cl N3 O2



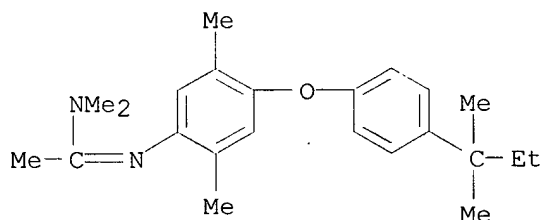
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 dimethyl- (9CI)  
 MF C21 H26 N2 O2



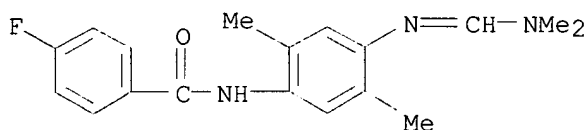
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 N,N-dimethyl- (9CI)  
 MF C23 H32 N2 O



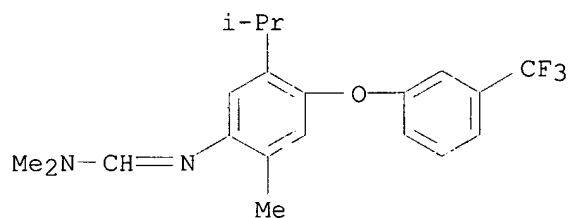
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 MF C18 H20 F N3 O



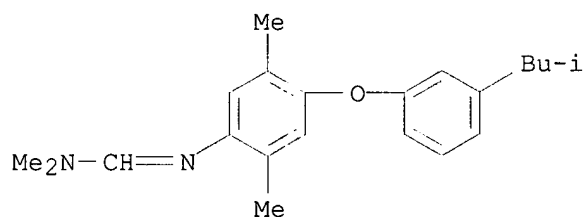
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C20 H23 F3 N2 O



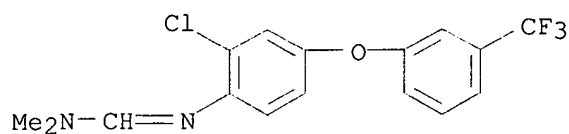
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C21 H28 N2 O



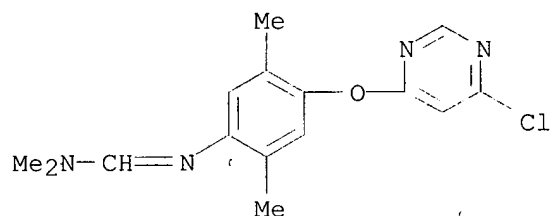
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C16 H14 Cl F3 N2 O



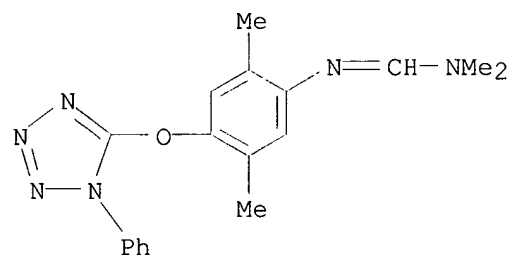
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 MF C15 H17 Cl N4 O



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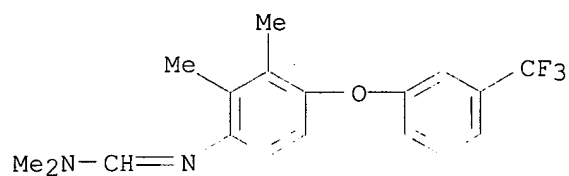
L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 yl)oxy]phenyl]-N,N-dimethyl- (9CI)  
 MF C18 H20 N6 O



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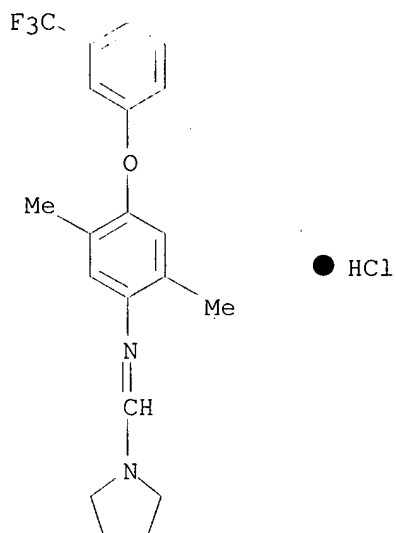
L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C18 H19 F3 N2 O



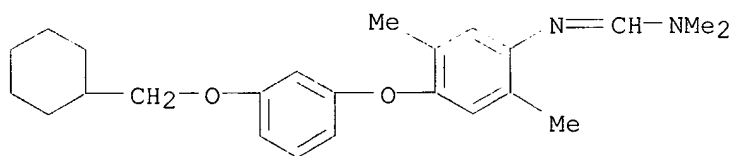


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C20 H21 F3 N2 O . Cl H

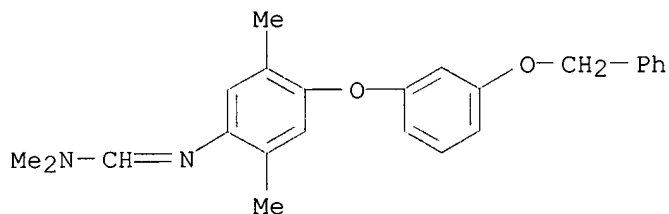


L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C24 H32 N2 O2



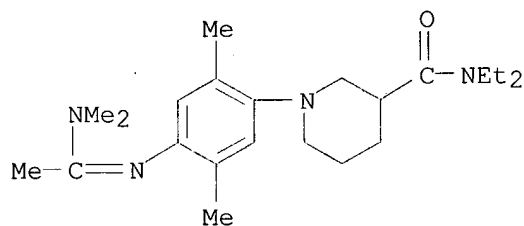
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 MF C24 H26 N2 O2



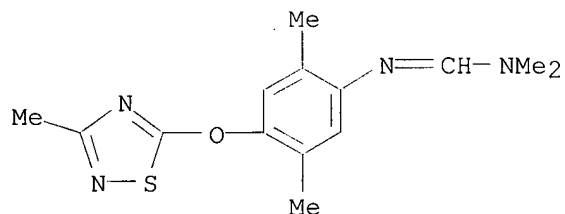
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L30 411 ANSWERS REGISTRY COPYRIGHT 2003 ACS  
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 MF C22 H36 N4 O



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 IN Methanimidamide, N'-[2,5-dimethyl-4-[(3-methyl-1,2,4-thiadiazol-5-yl)oxy]phenyl]-N,N-dimethyl- (9CI)  
 MF C14 H18 N4 O S



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HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

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FILE LAST UPDATED: 12 Mar 2003 (20030312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

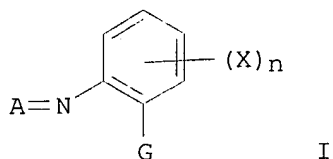
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L97 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
AN 2003:5930 HCAPLUS  
DN 138:73261  
TI Preparation of heterocyclyliminophenyl compounds as agricultural and horticultural fungicides and insecticides  
IN Niki, Toshio; Mizukoshi, Takashi; Takahashi, Hiroaki; Satow, Jun; Ogura, Tomoyuki; Yamagishi, Kazuhiro; Suzuki, Hiroyuki; Hayasaka, Fumio  
PA Nissan Chemical Industries, Ltd., Japan  
SO PCT Int. Appl., 508 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM C07D213-74  
ICS C07D239-42; C07D271-10; C07D277-42; C07D277-82; C07D279-06; C07D285-16; C07D285-12; C07D339-06; C07D327-04; C07D411-04; C07D411-10; C07D411-14; C07D413-04; C07D417-04; C07D417-10; C07D417-12; A01N043-28; A01N043-30; A01N043-40  
CC 28-14 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000659	A1	20030103	WO 2002-JP6424	20020626
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	JP 2001-192285	A	20010626		
	JP 2001-193428	A	20010626		
	JP 2001-385120	A	20011218		
	JP 2001-386846	A	20011220		
	JP 2002-90213	A	20020328		
OS	MARPAT 138:73261				

GI



AB The title compds. I [A is an optionally substituted heterocycle; X is hydrogen or the like; and G is CH<sub>2</sub>COOMe, N(Me)COOMe, or the like; n = 0 - 4] are prep'd. Compds. of this invention at 500 ppm gave .gtoreq. 70% control of Pyricularia oryzae.

ST heterocyclyliminophenyl compd prepn agrochem fungicide insecticide

IT Fungicides

(agrochem.; prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT Insecticides

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT	347871-82-3P	347871-85-6P	347871-89-0P	347871-92-5P	347871-95-8P
	347871-97-0P	347871-99-2P	347872-02-0P	347872-05-3P	347872-08-6P
	347872-11-1P	347872-14-4P	347872-17-7P	347872-20-2P	347872-23-5P
	347872-26-8P	347872-28-0P	347872-30-4P	347872-32-6P	347872-34-8P
	347872-36-0P	347872-38-2P	347872-40-6P	347872-42-8P	347872-44-0P
	347872-46-2P	347872-48-4P	347872-50-8P	347872-52-0P	347872-54-2P
	347872-56-4P	347872-58-6P	347872-60-0P	347872-63-3P	347872-68-8P
	347872-73-5P	347872-75-7P	347872-78-0P	347872-80-4P	347872-81-5P
	347872-83-7P	347872-85-9P	347872-87-1P	347872-88-2P	347872-90-6P
	347872-92-8P	347872-94-0P	347872-96-2P	347872-98-4P	347873-00-1P
	347873-02-3P	347873-04-5P	347873-06-7P	347873-08-9P	347873-10-3P
	347873-12-5P	347873-14-7P	347873-16-9P	347873-18-1P	347873-24-9P
	347873-26-1P	347873-28-3P	347873-30-7P	347873-32-9P	347873-39-6P
	347873-41-0P	347873-43-2P	347873-45-4P	347873-47-6P	347873-49-8P
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	347873-61-4P	347873-63-6P	347873-64-7P	347873-66-9P	347873-69-2P
	347873-71-6P	347873-73-8P	347873-75-0P	347873-77-2P	347873-79-4P
	347873-81-8P	347873-83-0P	347873-85-2P	347873-86-3P	347873-87-4P
	347873-88-5P	347873-89-6P	347873-90-9P	347873-91-0P	347873-93-2P
	347873-94-3P	347873-95-4P	347873-96-5P	347873-97-6P	347873-99-8P
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	347874-05-9P	347874-06-0P	347874-07-1P	347874-08-2P	347874-09-3P
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	347874-15-1P	347874-16-2P	347874-17-3P	347874-18-4P	347874-19-5P
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	347874-26-4P	347874-27-5P	347874-28-6P	347874-29-7P	347874-30-0P
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	347874-36-6P	347874-37-7P	347874-38-8P	347874-39-9P	347874-40-2P
	347874-41-3P	347874-42-4P	347874-44-6P	347874-45-7P	347874-46-8P
	347874-47-9P	347874-49-1P	347874-51-5P	347874-54-8P	347874-56-0P
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	347874-68-4P	347874-70-8P	347874-72-0P	347874-74-2P	347874-76-4P
	347874-77-5P	347874-79-7P	347874-80-0P	347874-81-1P	347874-82-2P
	347874-83-3P	347874-84-4P	347874-85-5P	347874-86-6P	347874-87-7P
	347874-88-8P	347874-89-9P	347874-91-3P	347874-93-5P	347874-94-6P
	347874-96-8P	347874-97-9P	347874-98-0P	347874-99-1P	347875-00-7P
	347875-01-8P	347875-02-9P	347875-03-0P	347875-04-1P	347875-06-3P
	347875-07-4P	347875-08-5P	347875-09-6P	347875-10-9P	347875-11-0P
	347875-12-1P	347875-13-2P	347875-14-3P	347875-15-4P	347875-16-5P
	347875-17-6P	347875-18-7P	347875-20-1P	347875-21-2P	347875-22-3P

347875-23-4P	347875-24-5P	347875-25-6P	347875-26-7P	347875-27-8P
347875-28-9P	347875-29-0P	347875-30-3P	347875-31-4P	347875-32-5P
347875-33-6P	347875-34-7P	347875-35-8P	347875-36-9P	347875-38-1P
347875-39-2P	347875-40-5P	347875-41-6P	347875-42-7P	347875-43-8P
347875-44-9P	347875-45-0P	347875-47-2P	347875-48-3P	347875-49-4P
347875-50-7P	347875-51-8P	347875-52-9P	347875-53-0P	347875-55-2P
347875-56-3P	347875-57-4P	347875-58-5P	347875-59-6P	347875-60-9P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT	347875-61-0P	347875-62-1P	347875-63-2P	347875-65-4P	347875-66-5P
	347875-67-6P	347875-68-7P	347875-69-8P	347875-71-2P	347875-72-3P
	347875-73-4P	347875-74-5P	347875-75-6P	347875-76-7P	347875-77-8P
	347875-78-9P	347875-79-0P	347875-80-3P	347875-81-4P	347875-82-5P
	347875-83-6P	347875-84-7P	347875-85-8P	347875-86-9P	347875-87-0P
	347875-89-2P	347875-90-5P	347875-91-6P	347875-92-7P	347875-94-9P
	347875-95-0P	347875-96-1P	347875-97-2P	347875-98-3P	347875-99-4P
	347876-00-0P	347876-01-1P	347876-02-2P	347876-03-3P	347876-04-4P
	347876-05-5P	347876-06-6P	347876-07-7P	347876-08-8P	347876-09-9P
	347876-10-2P	347876-11-3P	347876-12-4P	347876-13-5P	347876-14-6P
	347876-15-7P	347876-16-8P	347876-17-9P	347876-18-0P	347876-19-1P
	347876-20-4P	347876-21-5P	347876-26-0P	347876-27-1P	347876-28-2P
	347876-29-3P	347876-30-6P	347876-32-8P	347876-33-9P	347876-34-0P
	347876-35-1P	347876-36-2P	347876-37-3P	347876-39-5P	347876-40-8P
	347876-41-9P	347876-42-0P	347876-43-1P	347876-44-2P	347876-45-3P
	347876-46-4P	347876-47-5P	347876-48-6P	347876-49-7P	347876-50-0P
	347876-51-1P	347876-52-2P	347876-53-3P	347876-54-4P	347876-55-5P
	347876-56-6P	347876-57-7P	347876-58-8P	347876-59-9P	347876-60-2P
	347876-61-3P	347876-62-4P	347876-63-5P	347876-64-6P	347876-65-7P
	347876-66-8P	347876-67-9P	347876-68-0P	347876-69-1P	347876-70-4P
	347876-71-5P	347876-72-6P	347876-73-7P	347876-74-8P	347876-75-9P
	347876-76-0P	347876-77-1P	347876-78-2P	347876-79-3P	347876-80-6P
	347876-81-7P	347876-82-8P	347876-83-9P	347876-84-0P	347876-85-1P
	347876-86-2P	347876-87-3P	347876-88-4P	347876-89-5P	347876-90-8P
	347876-91-9P	347876-92-0P	347876-93-1P	347876-94-2P	347876-95-3P
	347876-97-5P	347876-98-6P	347876-99-7P	347877-00-3P	347877-01-4P
	347877-02-5P	347877-03-6P	347877-04-7P	347877-05-8P	347877-06-9P
	347877-07-0P	347877-08-1P	347877-09-2P	347877-10-5P	347877-11-6P
	347877-12-7P	347877-13-8P	347877-14-9P	347877-15-0P	347877-16-1P
	347877-17-2P	347877-19-4P	347877-20-7P	347877-21-8P	347877-22-9P
	347877-25-2P	347877-26-3P	347877-27-4P	347877-28-5P	347877-29-6P
	347877-30-9P	347877-31-0P	347877-32-1P	347877-33-2P	347877-35-4P
	347877-36-5P	347877-37-6P	347877-38-7P	347877-39-8P	347877-40-1P
	347877-41-2P	347877-42-3P	347877-43-4P	347877-44-5P	347877-45-6P
	347877-46-7P	347877-47-8P	347877-48-9P	347877-49-0P	347877-50-3P
	347877-51-4P	347877-52-5P	347877-53-6P	347877-54-7P	347877-55-8P
	347877-56-9P	347877-57-0P	347877-58-1P	347877-59-2P	347877-60-5P
	347877-61-6P	347877-62-7P	347877-63-8P	347877-64-9P	347877-65-0P
	347877-66-1P	347877-67-2P	347877-68-3P	347877-69-4P	347877-70-7P
	347877-71-8P	347877-72-9P	347877-73-0P	347877-74-1P	347877-75-2P
	347877-76-3P	347877-77-4P	347877-78-5P	481056-63-7P	481056-64-8P
	481056-65-9P	481056-67-1P	481056-68-2P	481056-71-7P	481056-72-8P
	481056-73-9P	481056-74-0P	481056-75-1P	481056-76-2P	481056-77-3P
	481056-78-4P	481056-79-5P	481056-80-8P	481056-81-9P	481056-82-0P
	481056-83-1P	481056-84-2P	481056-85-3P	481056-86-4P	481056-87-5P
	481056-88-6P	481056-89-7P	481056-90-0P	<b>481056-91-1P</b>	
	481056-92-2P	481056-93-3P	481056-94-4P	481056-95-5P	481056-96-6P
	481056-97-7P				

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT	481056-98-8P	481056-99-9P	481057-00-5P	481057-01-6P	481057-02-7P
	481057-03-8P	<b>481057-04-9P</b>	481057-05-0P	<b>481057-06-1P</b>	
	481057-07-2P	481057-08-3P	481057-09-4P	481057-10-7P	481057-11-8P
	481057-12-9P	481057-13-0P	481057-14-1P	481057-15-2P	481057-16-3P
	481057-17-4P	481057-18-5P	481057-20-9P	481057-21-0P	481057-22-1P
	481057-23-2P	481057-24-3P	481057-25-4P	481057-26-5P	481057-27-6P
	481057-28-7P	481057-29-8P	481057-30-1P	481057-31-2P	481057-32-3P
	481057-33-4P	481057-34-5P	481057-35-6P	481057-36-7P	481057-37-8P
	481057-38-9P	481057-39-0P	481057-40-3P	481057-41-4P	481057-42-5P
	481057-43-6P	481057-44-7P	481057-45-8P	481057-46-9P	481057-47-0P
	481057-48-1P	481057-49-2P	481057-50-5P	481057-51-6P	481057-52-7P
	481057-53-8P	481057-54-9P	481057-55-0P	481057-56-1P	481057-57-2P
	481057-58-3P	481057-59-4P	481057-60-7P	481057-61-8P	481057-62-9P
	481057-63-0P	481057-64-1P	481057-65-2P	481057-66-3P	481057-67-4P
	481057-68-5P	481057-69-6P	481057-70-9P	481057-71-0P	481057-72-1P
	481057-73-2P	481057-74-3P	481057-75-4P	481057-76-5P	481057-77-6P
	481057-78-7P	481057-79-8P	481057-80-1P	481057-81-2P	481057-82-3P
	481057-83-4P	481057-84-5P	481057-85-6P	481057-86-7P	481057-87-8P
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	481057-93-6P	481057-94-7P	481057-95-8P	481057-96-9P	481057-97-0P
	481057-98-1P	481057-99-2P	481058-00-8P	481058-01-9P	481058-02-0P
	481058-03-1P	481058-04-2P	481058-05-3P	481058-06-4P	481058-07-5P
	481058-08-6P	481058-09-7P	481058-10-0P	481058-11-1P	481058-12-2P
	481058-14-4P	481058-15-5P	481058-16-6P	481058-17-7P	481058-18-8P
	481058-19-9P	481058-20-2P	481058-21-3P	481058-22-4P	481058-23-5P
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	481058-40-6P	481058-41-7P	481058-42-8P	481058-43-9P	481058-44-0P
	481058-45-1P	481058-46-2P	481058-47-3P	481058-48-4P	481058-49-5P
	481058-50-8P	481058-51-9P	481058-52-0P	481058-53-1P	481058-54-2P
	481058-55-3P	481058-56-4P	481058-57-5P	481058-58-6P	481058-59-7P
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	481058-65-5P	481058-66-6P	481058-67-7P	481058-68-8P	481058-69-9P
	481058-70-2P	481058-71-3P	481058-72-4P	481058-73-5P	481058-74-6P
	481058-75-7P	481058-76-8P	481058-77-9P	481058-78-0P	481058-79-1P
	481058-80-4P	481058-81-5P	481058-82-6P	481058-83-7P	481058-84-8P
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	481059-00-1P	481059-01-2P	481059-02-3P	481059-03-4P	481059-04-5P
	481059-05-6P	481059-06-7P	481059-07-8P	481059-08-9P	481059-09-0P
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	481059-25-0P	481059-26-1P	481059-27-2P	481059-28-3P	481059-29-4P
	481059-30-7P	481059-31-8P	481059-32-9P	481059-33-0P	481059-34-1P
	481059-35-2P				

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT	481059-36-3P	481059-37-4P	481059-38-5P	481059-39-6P	481059-40-9P
	481059-41-0P	481059-42-1P	481059-43-2P	481059-44-3P	481059-45-4P
	481059-46-5P	481059-47-6P	481059-48-7P	481059-49-8P	481059-50-1P
	481059-52-3P	481059-53-4P	481059-54-5P	481059-55-6P	481059-56-7P
	481059-57-8P	481059-58-9P	481059-59-0P	481059-60-3P	481059-61-4P
	481059-62-5P	481059-63-6P	481059-64-7P	481059-65-8P	481059-66-9P
	481059-67-0P	481059-68-1P	481059-69-2P	481059-70-5P	481059-71-6P
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481059-77-2P	481059-78-3P	481059-79-4P	481059-80-7P	481059-81-8P
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RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

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RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT	481064-92-0P	481064-93-1P	481064-94-2P	481064-95-3P	481064-96-4P
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	481065-38-7P	481065-39-8P	481065-40-1P	481065-41-2P	481065-42-3P
	481065-43-4P	481065-44-5P	481069-75-4P		

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT 481058-13-3P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

IT 57-14-7, 1,1-Dimethylhydrazine 60-34-4, Methylhydrazine 62-53-3, Aniline, reactions 70-11-1, Phenacyl bromide 74-88-4, Methyl iodide, reactions 74-89-5, Methylamine, reactions 75-03-6, Ethyl iodide 75-15-0, Carbon disulfide, reactions 77-78-1, Dimethyl sulfate 79-22-1, Methyl chloroformate 83-41-0, 2,3-Dimethylnitrobenzene 88-74-4, 2-Nitroaniline 89-60-1, 2-Chloro-5-methylnitrobenzene 95-55-6, 2-Aminophenol 96-32-2, Methyl bromoacetate 98-88-4, Benzoyl chloride 99-73-0, 2-Bromo-1-(4-bromophenyl)ethanone 107-14-2,



Chloroacetonitrile 107-30-2, Chloromethyl methyl ether 107-31-3,  
 Methyl formate 108-59-8, Dimethyl malonate 109-92-2, Ethyl vinyl ether  
 111-49-9 123-07-9, 4-Ethylphenol 124-40-3, Dimethylamine, reactions  
 124-63-0, Methanesulfonyl chloride 128-04-1, Sodium  
 dimethyldithiocarbamate 302-01-2, Hydrazine, reactions 333-27-7,  
 Methyl trifluoromethanesulfonate 367-57-7 383-53-9 407-25-0,  
 Trifluoroacetic anhydride 421-52-3 431-35-6, 3-Bromo-1,1,1-trifluoro-2-  
 propanone 463-71-8, Thiophosgene 536-38-9 541-41-3, Ethyl  
 chloroformate 556-61-6, Methyl isothiocyanate 557-21-1, Zinc cyanide  
 570-24-1, 2-Methyl-6-nitroaniline 589-09-3 593-56-6 615-20-3,  
 2-Chlorobenzothiazole 615-43-0, 2-Iodoaniline 618-39-3, Benzamidine  
 758-08-7 925-90-6, Ethylmagnesium bromide 934-36-1,  
 1,3-Benzodithiole-2-thione 937-60-0 1068-57-1, Acetohydrazide  
 1451-82-7 1513-65-1, 2,6-Difluoropyridine 2407-68-3,  
 3-Dimethylaminoacrylonitrile 2631-72-3 2782-91-4, Tetramethylthiourea  
 2835-77-0 3320-86-3, 2-Nitrophenyl isocyanate 3740-52-1,  
 2-(2-Nitrophenyl)acetic acid 5000-66-8, 2-Chlorophenacyl bromide  
 5188-07-8, Sodium methylmercaptan 5344-90-1, 2-Aminobenzyl alcohol  
 5470-11-1, Hydroxylamine hydrochloride 6160-65-2 7664-41-7, Ammonia,  
 reactions 13223-25-1, 2-Chloro-4,6-dimethoxypyrimidine 18165-76-9,  
 Trimethylsilylmethanethiol 22118-09-8, Bromoacetyl chloride  
 26682-99-5, Methyl 2-(2-aminophenyl)acetate 29585-02-2,  
 1-Bromo-4-methyl-2-pentanone 30095-47-7 30525-89-4, Paraformaldehyde  
 31949-21-0, 2-Methoxyphenacyl bromide 32315-10-9, Triphosgene  
 35161-71-8, N-Methyl-N-propargylamine 52334-81-3, 2-Chloro-5-  
 trifluoromethylpyridine 52605-49-9 61964-74-7 80194-68-9  
 95728-57-7 177787-26-7, 3,4,5-Trifluorobenzoyl chloride 208173-16-4  
 210647-38-4 347877-89-8 443914-94-1 445470-09-7 481066-16-4  
 481066-17-5 481066-18-6 481066-21-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of heterocyclyliminophenyl compds. as agricultural and  
 horticultural fungicides and insecticides)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of heterocyclyliminophenyl compds. as agricultural and  
 horticultural fungicides and insecticides)

IT 64-18-6DP, Formic acid, salts 64-19-7DP, Acetic acid, salts  
 144-62-7DP, Oxalic acid, salts 7647-01-0DP, Hydrochloric acid, salt  
 10034-85-2DP, Hydroiodic acid, salts 10035-10-6DP, Hydrobromic acid,  
 salts

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN

(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. or salts thereof as agricultural and horticultural fungicides and insecticides)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Boots Co Plc; JP 02229148 A 1990 HCAPLUS
- (2) Boots Co Plc; GB 2226562 A1 1990 HCAPLUS
- (3) Boots Co Plc; EP 385038 A1 1990 HCAPLUS
- (4) Boots Co Plc; US 5223498 A 1990 HCAPLUS
- (5) Boots Co Plc; US 5373008 A 1990 HCAPLUS
- (6) Dai Nippon Printing Co Ltd; JP 03-16792 A 1991 HCAPLUS
- (7) Dai Nippon Printing Co Ltd; US 5021394 A 1991 HCAPLUS
- (8) Fuji Photo Film Co Ltd; JP 03-244593 A 1993 HCAPLUS
- (9) Fuji Photo Film Co Ltd; JP 05-177959 A2 1993 HCAPLUS
- (10) Fuji Photo Film Co Ltd; JP 05-202305 A 1993 HCAPLUS
- (11) Fuji Photo Film Co Ltd; JP 05-70704 A 1993 HCAPLUS
- (12) Fuji Photo Film Co Ltd; US 5238903 A 1993 HCAPLUS
- (13) Kalcheva, V; Liebigs Ann Chem 1993, 12, P1319 HCAPLUS
- (14) Nissan Chemical Industries; WO 0147888 A1 2001 HCAPLUS
- (15) Sumitomo Chemical Co Ltd; JP 01-165565 A 1988 HCAPLUS
- (16) Sumitomo Chemical Co Ltd; EP 287377 A2 1988 HCAPLUS
- (17) Sumitomo Chemical Co Ltd; US 5028708 A 1988 HCAPLUS
- (18) Sumitomo Chemical Co Ltd; US 5061796 A 1988 HCAPLUS
- (19) Sumitomo Chemical Co Ltd; US 5136054 A 1988 HCAPLUS
- (20) Sumitomo Chemical Co Ltd; US 5220027 A 1988 HCAPLUS

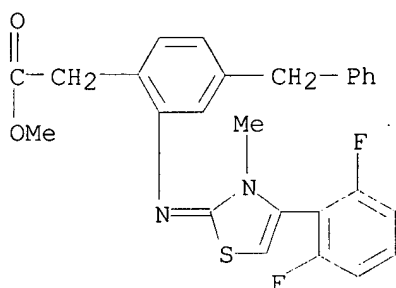
IT 481056-91-1P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclyliminophenyl compds. as agricultural and horticultural fungicides and insecticides)

RN 481056-91-1 HCAPLUS

CN Benzeneacetic acid, 2-[[4-(2,6-difluorophenyl)-3-methyl-2(3H)-thiazolylidene]amino]-4-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)



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AN 2002:182202 HCAPLUS

DN 136:232317

TI Preparation of heterocyclylbenzenes as herbicides and defoliants.

IN Gupta, Sandeep; Wu, Shao-Yong; Tsukamoto, Masamitsu; Pulman, David A.; Ying, Bai-Ping

PA ISK Americas Incorporated, USA

SO U.S., 74 pp., Cont.-in-part of U.S. Ser. No. 958,313.  
CODEN: USXXAM

DT Patent

LA English

IC ICM C07D239-02

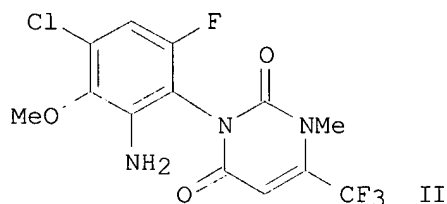
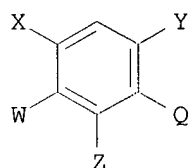
NCL 544309000

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6355799	B1	20020312	US 2000-530373	20000427
	WO 9921837	A1	19990506	WO 1998-US17197	19980821 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 2002133007	A1	20020919	US 2001-930149	20010816
PRAI	US 1997-958313	A2	19971027		
	WO 1998-US17197	W	19980821		
	US 2000-530373	A3	20000427		
OS	MARPAT 136:232317				
GI					



- AB Title compds. [I; X = H, halo, NO<sub>2</sub>, amino, NHR, NR<sub>2</sub>, amide, thioamide, cyano, alkylcarbonyl, alkoxy, carbonyl, alkylsulfonamide, (substituted) alkyl, haloalkyl, alkoxy, haloalkoxy, alkoxy, carbonyloxy, PhCH<sub>2</sub>O, aryloxy, heteroaryloxy; Y = H, halo, NO<sub>2</sub>; W = H, OR, SR, NHR, NR<sub>2</sub>, CH<sub>2</sub>R, CHR<sub>2</sub>, CR<sub>3</sub>, halo, NO<sub>2</sub>, cyano; R = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, alkoxy, cycloalkoxy, aryloxy, heteroaryloxy, alkylsulfonyl, PhCH<sub>2</sub>, alkylcarbonyl, aryloxy, carbonyl, etc.; Q = (substituted) heterocyclyl; Z = amino, OH, SH, CHO, CO<sub>2</sub>H, cyano, alkylcarbonyl, arylcarbonyl, N<sub>3</sub>, etc.] were prepd. Thus, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-6-trifluoromethyl-2,4(1H,3H)-pyrimidinedione (prepn. given) was stirred with Fe powder in HOAc to give title compd. (II). II at 7.8 g/ha post-emergent gave 100% control of *Amaranthus retroflexus* and *Abutilon theophrasti*.
- ST substituted benzene compd process prepn herbicidal defoliant compn; heterocyclylbenzene prepn herbicide defoliant; pyrimidinedione prepn herbicide defoliant; tetrazolone prepn herbicide defoliant; triazolone prepn herbicide defoliant; pyrazole 1 prepn herbicide; phthalimide prepn herbicide; pyridiazinone prepn herbicide
- IT Cotton  
Potato (*Solanum tuberosum*)  
(defoliation; prepn. of heterocyclylbenzenes as herbicides and defoliants)
- IT Defoliant  
Herbicides  
(prepn. of heterocyclylbenzenes as herbicides and defoliants)
- IT Cereal (grain)  
(protection of; prepn. of heterocyclylbenzenes as herbicides and defoliants)
- IT 212755-09-4P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluoro-3-

hydroxyphenyl)-1-methyl-6-(trifluoromethyl)- 224163-11-5P, Acetamide, 2-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-76-2P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224166-62-5P, 3(2H)-Pyridazinone, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-5-(trifluoromethyl)- 224166-80-7P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)- 224167-67-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-2-hydrazino-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)-  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)  
 IT 212755-06-1P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-bromo-6-fluoro-3-hydroxyphenyl)-1-methyl-6-(trifluoromethyl)- 212755-08-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 212902-22-2P, Cyclopropanecarboxamide, N-[5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]- 212904-47-7P, 2,4(1H,3H)-Pyrimidinedione, 1-methyl-3-(2-nitrophenyl)-6-(trifluoromethyl)- 212904-48-8P, 2,4(1H,3H)-Pyrimidinedione, 1-methyl-3-[2-nitro-4-(trifluoromethyl)phenyl]-6-(trifluoromethyl)- 224162-36-1P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-6-(trifluoromethyl)- 224162-37-2P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-6-(trifluoromethyl)- 224162-38-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-6-(trifluoromethyl)- 224162-39-4P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-40-7P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-41-8P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-bromo-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-42-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-bromo-6-fluoro-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-43-0P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-5-nitro-6-(trifluoromethyl)- 224162-44-1P, 2,4(1H,3H)-Pyrimidinedione, 5-amino-3-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-45-2P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-2-(dimethylamino)-6-fluoro-3-methoxyphenyl]-1-methyl-6-(trifluoromethyl)- 224162-46-3P, 2,4(1H,3H)-Pyrimidinedione, 1-amino-3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-6-(trifluoromethyl)- 224162-47-4P, 2,4(1H,3H)-Pyrimidinedione, 1-amino-3-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-6-(trifluoromethyl)- 224162-48-5P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-ethyl-6-(trifluoromethyl)- 224162-49-6P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-1-ethyl-6-(trifluoromethyl)- 224162-50-9P, Acetonitrile, [2-amino-6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenoxy]- 224162-51-0P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-6-fluoro-3-(2-propynyloxy)phenyl]-1-methyl-6-(trifluoromethyl)- 224162-52-1P, 2-Butenoic acid, 4-[2-amino-6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenoxy]-, methyl ester, (2E)- 224162-53-2P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-3-(cyclopentyloxy)-6-fluorophenyl]-1-methyl-6-(trifluoromethyl)- 224162-54-3P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-6-fluoro-3-(phenylmethoxy)phenyl]-1-methyl-6-(trifluoromethyl)- 224162-55-4P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-6-fluoro-3-[(3-nitro-2-pyridinyl)oxy]phenyl]-1-methyl-6-(trifluoromethyl)- 224162-56-5P, Ethanimidoyl chloride, 2,2,2-trichloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224162-57-6P, Methanimidamide, N'-[3-chloro-6-[3,6-dihydro-3-

methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N,N-dimethyl- 224162-58-7P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-(1-pyrrolidinyl)phenyl]-1-methyl-6-(trifluoromethyl)- 224162-59-8P, Carbamic acid, [6-chloro-3-[3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-2-nitrophenyl]-, ethyl ester 224162-60-1P, Carbamic acid, [6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-2-nitrophenyl]-, ethyl ester 224162-63-4P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-3-(difluoromethoxy)-6-fluorophenyl]-1-methyl-6-(trifluoromethyl)- 224162-64-5P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-azido-4-chloro-6-fluoro-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-65-6P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-aminophenyl)-1-methyl-6-(trifluoromethyl)- 224162-66-7P, Benzonitrile, 4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-nitro- 224162-67-8P, Benzonitrile, 3-amino-4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]- 224162-68-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(4,6-dichloro-3-hydroxy-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-69-0P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-fluoro-4-methoxy-6-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-70-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4,6-dichloro-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-71-4P, Propanoic acid, 2-[3-amino-4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenoxy]-, ethyl ester 224162-72-5P, Propanoic acid, 2-[4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-nitrophenoxy]-, ethyl ester 224162-73-6P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-(difluoromethoxy)-2-fluoro-6-nitrophenyl]-1-methyl-6-(trifluoromethyl)- 224162-74-7P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-(difluoromethoxy)-6-fluorophenyl]-1-methyl-6-(trifluoromethyl)- 224162-76-9P, Alanine, N-[5-(difluoromethoxy)-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-fluorophenyl]-, ethyl ester 224162-77-0P, Alanine, N-[5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-fluorophenyl]-, ethyl ester 224162-78-1P, Alanine, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, ethyl ester 224162-79-2P, 2,4(1H,3H)-Pyrimidinedione, 1-amino-3-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-6-(trifluoromethyl)- 224162-80-5P, Acetonitrile, [2-amino-3-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-6-chloro-4-fluorophenoxy]- 224162-81-6P, Acetic acid, [2-amino-3-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-6-chloro-4-fluorophenoxy]-, methyl ester 224162-82-7P, Acetic acid, [2-amino-6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenoxy]-, ethyl ester 224162-83-8P, Propanoic acid, 2-[2-amino-6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenoxy]-, ethyl ester 224162-84-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-3-ethoxy-6-fluorophenyl)-1-methyl-6-(trifluoromethyl)- 224162-85-0P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-3-ethoxy-2-(ethylamino)-6-fluorophenyl]-1-methyl-6-(trifluoromethyl)- 224162-86-1P, 2,4(1H,3H)-Pyrimidinedione, 3-[2-amino-4-chloro-6-fluoro-3-(1-methylethoxy)phenyl]-1-methyl-6-(trifluoromethyl)- 224162-87-2P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-(1-methylethoxy)-2-[(1-methylethyl)amino]phenyl]-1-methyl-6-(trifluoromethyl)- 224162-88-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-nitrophenyl)-5-nitro-6-(trifluoromethyl)- 224162-89-4P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-3-hydroxy-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-90-7P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-3-hydroxy-2,6-dinitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-91-8P, 2,4(1H,3H)-Pyrimidinedione, 1-methyl-3-[2-nitro-4-(trifluoromethoxy)phenyl]-6-(trifluoromethyl)- 224162-92-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-3-methoxy-2,6-dinitrophenyl)-6-(trifluoromethyl)- 224162-93-0P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-3,6-difluoro-2-nitrophenyl)-6-(trifluoromethyl)- 224162-94-1P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-3-

hydroxyphenyl)-1-methyl-6-(trifluoromethyl)- 224162-96-3P,  
2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-3-methoxyphenyl)-1-methyl-  
6-(trifluoromethyl)- 224162-97-4P, 2,4(1H,3H)-Pyrimidinedione,  
3-[2-amino-4-(trifluoromethoxy)phenyl]-1-methyl-6-(trifluoromethyl)-  
224162-98-5P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224162-99-6P, Acetamide, N-acetyl-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-  
dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-00-2P, Propanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,2-  
dimethyl- 224163-01-3P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-  
methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-  
methoxyphenyl]-N-(1-oxo-2-propenyl)- 224163-02-4P, 2-Propenamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-methyl- 224163-03-5P,  
2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-methyl-N-  
(2-methyl-1-oxo-2-propenyl)- 224163-04-6P, 2-Butenamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methyl- 224163-05-7P,  
2-Butenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methyl-N-  
(3-methyl-1-oxo-2-butenyl)- 224163-07-9P, Acetamide,  
N-[3-chloro-6-[3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,2,2-trifluoro- 224163-08-0P,  
Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,2,2-  
trifluoro- 224163-09-1P, Acetamide, N-[3-chloro-2-(cyanomethoxy)-6-[3,6-  
dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-  
fluorophenyl]-2,2,2-trifluoro- 224163-10-4P, Acetamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-5-[(trifluoroacetyl)amino]-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,2,2-  
trifluoro- 224163-12-6P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-  
2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
2-cyano- 224163-13-7P, Acetic acid, [[3-chloro-6-[3,6-dihydro-3-methyl-  
2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-  
methoxyphenyl]amino]oxo-, methyl ester 224163-14-8P, Propanedioic acid,  
6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-2-[(3-ethoxy-1,3-dioxopropyl)amino]-4-fluorophenyl ethyl  
ester 224163-15-9P, Cyclopropanecarboxamide, N-[3-chloro-6-[3,6-dihydro-  
3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-  
methoxyphenyl]- 224163-16-0P, Cyclopropanecarboxamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(cyclopropylcarbonyl)-  
224163-17-1P, Cyclohexanecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-  
2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-19-3P, Cyclohexanecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-  
methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-  
methoxyphenyl]-N-(cyclohexylcarbonyl)- 224163-20-6P, Methanesulfonamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(methylsulfonyl)- 224163-21-7P,  
Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-22-8P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methyl-  
224163-23-9P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-methyl-  
224163-24-0P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-methyl-N-  
(4-methylbenzoyl)- 224163-25-1P, Benzenesulfonamide,  
N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-methyl- 224163-26-2P,  
Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-

(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-ethyl-  
224163-27-3P, Benzamide, N-[3-chloro-2-(cyanomethoxy)-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]-4-ethyl-  
224163-29-5P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-propyl-N-(4-propylbenzoyl)-  
224163-30-8P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-(1,1-dimethylethyl)-  
224163-31-9P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-ethenyl-  
224163-32-0P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3,4-dimethyl-  
224163-33-1P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-(trifluoromethyl)-  
224163-34-2P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-[4-(trifluoromethyl)benzoyl]-  
224163-35-3P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-(chloromethyl)-  
224163-36-4P, [1,1'-Biphenyl]-4-carboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-37-5P, [1,1'-Biphenyl]-4-carboxamide, N-([1,1'-biphenyl]-4-ylcarbonyl)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-39-7P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-fluoro-  
224163-40-0P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-fluoro-  
224163-41-1P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,3-dimethyl-  
224163-42-2P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,4-difluoro-  
224163-43-3P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(2,4-difluorobenzoyl)-2,4-difluoro-  
224163-44-4P, Benzamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-methoxyphenyl]-2,4-difluoro-  
224163-45-5P, Benzamide, N-[3-chloro-2-(cyanomethoxy)-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]-N-(2,4-difluorobenzoyl)-2,4-difluoro-  
224163-47-7P, Benzenecarbothioamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2-oxo-6-thioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,4-difluoro-  
224163-48-8P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,6-difluoro-  
224163-49-9P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3,4-difluoro-  
224163-50-2P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(3,4-difluorobenzoyl)-3,4-difluoro-  
224163-51-3P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3,5-difluoro-  
224163-52-4P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(3,5-difluorobenzoyl)-3,5-difluoro-  
224163-53-5P, Benzamide, 2-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-55-7P, Benzamide, 3-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-56-8P, Benzamide, 3-chloro-N-(3-chlorobenzoyl)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224163-57-9P, Benzamide, 4-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-

224163-58-0P, Benzamide, 4-chloro-N-(4-chlorobenzoyl)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-59-1P, Benzamide, 2,4-dichloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-60-4P, Benzamide, 3,4-dichloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-61-5P, Benzamide, 3-bromo-N-(3-bromobenzoyl)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-62-6P, Benzamide, 4-bromo-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-63-7P, Benzamide, 4-bromo-N-(4-bromobenzoyl)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-65-9P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-methoxy- 224163-66-0P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-ethoxy- 224163-67-1P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-iodo- 224163-68-2P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-cyano- 224163-69-3P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-nitro-N-(4-nitrobenzoyl)- 224163-70-6P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3,5-dinitro- 224163-71-7P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-(trifluoromethoxy)-N-[4-(trifluoromethoxy)benzoyl]- 224163-72-8P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-(trifluoromethoxy)- 224163-74-0P, 1-Piperidinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-75-1P, 1-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-77-3P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-78-4P, 2-Naphthalenecarboxamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-methoxyphenyl]- 224163-79-5P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-phenyl-, (2E)- 224163-80-8P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2,4-difluorophenyl)-, (2E)- 224163-81-9P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-methylphenyl)-, (2E)- 224163-82-0P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(4-chlorophenyl)-N-[(2E)-3-(2-chlorophenyl)-1-oxo-2-propenyl]-, (2E)- 224163-86-4P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(4-chlorophenyl)-, (2E)- 224163-87-5P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(4-methoxyphenyl)-, (2E)- 224163-88-6P, Benzenepropanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-89-7P, Benzenepropanamide, N-[3-chloro-2-(cyanomethoxy)-6-[3,6-



dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]- 224163-90-0P, Benzenebutanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-91-1P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(phenylmethoxy)- 224163-92-2P, 2-Furancarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-93-3P, 2-Furancarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methyl- 224163-94-4P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-furanyl)-, (2E)- 224163-96-6P, 2-Thiopheneacetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224163-97-7P, 2-Thiophenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-hydroxyphenyl]-3-methyl- 224163-98-8P, 2-Thiophenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-5-methyl- 224163-99-9P, 2-Thiophenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-5-methyl-N-[(5-methyl-2-thienyl)carbonyl]- 224164-00-5P, 2-Thiophenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(2-thienylcarbonyl)- 224164-01-6P, 3-Pyridinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-02-7P, 3-Pyridinecarboxamide, 6-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-[(6-chloro-3-pyridinyl)carbonyl]- 224164-03-8P, 2-Pyridinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-hydroxyphenyl]-3-nitro- 224164-04-9P, 2-Pyrimidinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-hydroxyphenyl]- 224164-05-0P, Benzo[b]thiophene-2-carboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-06-1P, 2-Quinolinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-07-2P, 2-Quinoxalinecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-08-3P, Benzamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,4-difluoro- 224164-09-4P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-thienyl)- 224164-11-8P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-hydroxyphenyl]- 224164-12-9P, 2-Naphthalenecarboxamide, N-[3-chloro-2-(difluoromethoxy)-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]- 224164-13-0P, Acetamide, 2-(acetyloxy)-N-[(acetyloxy)acetyl]-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-14-1P, Acetamide, 2-(acetyloxy)-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-15-2P, Acetic acid, [[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]amino]oxo-, ethyl ester 224164-16-3P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-phenoxy- 224164-17-4P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-phenoxy-N-(phenoxyacetyl)- 224164-18-5P, Benzeneacetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-

2-methoxyphenyl]-.alpha.-oxo- 224164-20-9P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]- 224164-21-0P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-3-phenyl-, (2E)- 224164-22-1P, Benzamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,6-dimethyl- 224164-23-2P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-fluorophenyl)-, (2E)- 224164-24-3P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-nitrophenyl)-, (2E)- 224164-25-4P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2-methoxyphenyl)-, (2E)- 224164-26-5P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(2,6-dichlorophenyl)-, (2E)- 224164-27-6P, Benzenepropanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-methyl- 224164-29-8P, Benzenepropanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2,5-dimethyl- 224164-30-1P, 2-Naphthalenecarboxamide, N-[5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]- 224164-31-2P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(4-fluorophenoxy)- 224164-32-3P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-(3-chlorophenyl)-, (2E)- 224164-33-4P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(4-chlorophenoxy)- 224164-34-5P, 2-Propenamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-cyano-3-phenyl- 224164-35-6P, 2-Propenamide, N-[5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]-3-phenyl-, (2E)- 224164-37-8P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]-N-(2-naphthalenylcarbonyl)- 224164-38-9P, 2-Naphthalenecarboxamide, N-[5-cyano-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]- 224164-39-0P, 2-Propenamide, N-[5-cyano-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]-3-phenyl-, (2E)- 224164-40-3P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]- 224164-41-4P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-methoxyphenyl]- 224164-42-5P, 2-Naphthalenecarboxamide, N-[3,5-dichloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-6-methoxyphenyl]- 224164-43-6P, 2-Naphthalenecarboxamide, N-[5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-fluorophenyl]- 224164-44-7P, Propanoic acid, 2-[4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-[(2-naphthalenylcarbonyl)amino]phenoxy]-, ethyl ester 224164-45-8P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-2-(cyclopropylamino)-6-fluorophenyl]-1-methyl-6-(trifluoromethyl)- 224164-46-9P, 2-Naphthalenecarboxamide, N-[5-(difluoromethoxy)-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-fluorophenyl]- 224164-47-0P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-(trifluoromethyl)phenyl]- 224164-48-1P, Benzeneacetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-hydroxyphenyl]-

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 224164-49-2P, Benzeneacetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
224164-50-5P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methoxy- 224164-51-6P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-1-methoxy- 224164-52-7P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(2,4-dichlorophenoxy)- 224164-53-8P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-methyl- 224164-55-0P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-6-methyl- 224164-56-1P, 2-Naphthalenecarboxamide, 3-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-57-2P, 2-Naphthalenecarboxamide, 5-bromo-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-58-3P, 2-Naphthalenecarboxamide, 4-bromo-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-59-4P, 2-Naphthalenecarboxamide, 4-bromo-N-[(4-bromo-2-naphthalenyl)carbonyl]-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-60-7P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-8-fluoro- 224164-61-8P, 2-Naphthalenecarboxamide, 5-chloro-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-62-9P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-5-cyano- 224164-64-1P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-[(phenylmethyl)thio]- 224164-65-2P, Acetamide, 2-bromo-N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-66-3P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(phenylthio)- 224164-67-4P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(methylthio)- 224164-68-5P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(2-naphthalenylthio)- 224164-69-6P, Acetic acid, [[2-[[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]amino]-2-oxoethyl]thio]-, ethyl ester 224164-70-9P, Propanoic acid, 3-[[2-[[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]amino]-2-oxoethyl]thio]-, ethyl ester 224164-72-1P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(ethylthio)- 224164-73-2P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-[(1-methylethyl)thio]- 224164-74-3P, Acetamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-2-(propylthio)- 224164-75-4P, 2-Propenamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-phenyl-, (2E)- 224164-76-5P, 2-Propenamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-[(2E)-1-oxo-3-phenyl-2-propenyl]-3-phenyl-, (2E)- 224164-77-6P, 2-Propenamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-phenyl-, (2Z)- 224164-79-8P, 2-Propenamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-

(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(1-oxo-3-phenyl-2-propenyl)-3-phenyl- 224164-80-1P, 2-Propenamide, N-[3-cyano-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-3-phenyl-, (2E)- 224164-81-2P, 2-Naphthalenecarboxamide, N-[3-cyano-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-224164-82-3P, Benzamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-ethenyl-224164-83-4P, Benzamide, N-[3-bromo-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-4-ethenyl-N-(4-ethenylbenzoyl)- 224164-84-5P, 2-Propenamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-methoxyphenyl]-3-phenyl-, (2E)- 224164-85-6P, 2-Propenamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-methoxyphenyl]-N-[(2E)-1-oxo-3-phenyl-2-propenyl]-3-phenyl-, (2E)- 224164-86-7P, Acetamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-methoxyphenyl]-2-(phenylmethoxy)- 224164-88-9P, 2-Naphthalenecarboxamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-6-(cyanomethoxy)-3-fluorophenyl]- 224164-89-0P, Acetic acid, [6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-2-[(2-naphthalenylcarbonyl)amino]phenoxy]-, ethylester 224164-90-3P, Acetic acid, [6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-2-[(2E)-1-oxo-3-phenyl-2-propenyl]amino]phenoxy]-, ethyl ester 224164-91-4P, Propanoic acid, 2-[6-chloro-3-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-2-[(2-naphthalenylcarbonyl)amino]phenoxy]-, ethyl ester 224164-92-5P, 2-Naphthalenecarboxamide, N-[2-[3-amino-3,6-dihydro-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-chloro-3-fluoro-6-hydroxyphenyl]- 224164-93-6P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-[[4-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]- 224164-94-7P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-(2-propynyloxy)phenyl]- 224164-95-8P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-ethoxy-5-fluorophenyl]- 224164-97-0P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-(1-methylethoxy)phenyl]- 224164-98-1P, Hexanamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224164-99-2P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-[(3-nitro-2-pyridinyl)oxy]phenyl]- 224165-00-8P, 2-Naphthalenecarboxamide, N-[3-chloro-2-(cyanomethoxy)-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]- 224165-01-9P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-methylphenyl]- 224165-02-0P, 2-Naphthalenecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-methoxyphenyl]- 224165-03-1P, 2-Naphthalenecarboxamide, N-[2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-(trifluoromethoxy)phenyl]- 224165-04-2P, 2-Naphthalenecarboxamide, N-[5-(aminothioxomethyl)-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]- 224165-05-3P, Cyclopropanecarboxamide, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-methoxyphenyl]- 224165-07-5P, Benzoic acid, 4-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-[(2-naphthalenylcarbonyl)amino]-, methyl ester 224165-08-6P, Imidodicarbonic diamide, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N,N'-dimethyl- 224165-09-7P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-

2-methoxyphenyl]-N'-propyl- 224165-10-0P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(1-methylethyl)- 224165-11-1P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-phenyl- 224165-12-2P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(phenylmethyl)- 224165-13-3P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(1-phenylethyl)- 224165-14-4P, Urea, N'-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-methyl-N-(phenylmethyl)- 224165-15-5P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-[(4-methylphenyl)methyl]- 224165-16-6P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-[(2,4-difluorophenyl)methyl]- 224165-18-8P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(2-phenylethyl)- 224165-19-9P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(3-phenylpropyl)- 224165-20-2P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-2-naphthalenyl- 224165-21-3P, Urea, N'-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-phenyl-N-(phenylmethyl)- 224165-22-4P, Urea, N-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N'-(diphenylmethyl)- 224165-23-5P, Urea, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]- 224165-24-6P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, methyl ester 224165-25-7P, Imidodicarbonic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, dimethyl ester 224165-26-8P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, phenyl ester 224165-28-0P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 2,4-dimethylphenyl ester 224165-29-1P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, phenylmethyl ester 224165-30-4P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (4-fluorophenyl)methyl ester 224165-31-5P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 2-naphthalenyl ester 224165-32-6P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, cyclohexyl ester 224165-33-7P, Carbamothioic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, S-phenyl ester 224165-34-8P, Carbamic acid, [3-chloro-2-(cyanomethoxy)-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluorophenyl]-, phenylmethyl ester 224165-35-9P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (2,6-dichlorophenyl)methyl ester 224165-36-0P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 2,4,6-trimethylphenyl ester 224165-38-2P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (3,4-dimethylphenyl)methyl ester 224165-39-3P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 2-(1,1-dimethylethyl)phenyl ester 224165-40-6P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-

(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 2-naphthalenylmethyl ester 224165-41-7P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (2,6-difluorophenyl)methyl ester  
 224165-42-8P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (3,4-difluorophenyl)methyl ester 224165-43-9P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (4-ethylphenyl)methyl ester  
 224165-44-0P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (3,4-dichlorophenyl)methyl ester 224165-45-1P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, [2-(trifluoromethyl)phenyl]methyl  
 ester 224165-46-2P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-  
 dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (2-nitrophenyl)methyl ester 224165-47-3P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (2-methoxyphenyl)methyl ester  
 224165-48-4P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 2-pyridinylmethyl ester 224165-49-5P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (3,5-dimethylphenyl)methyl ester  
 224165-50-8P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (2,5-dimethylphenyl)methyl ester 224165-51-9P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, (2,5-difluorophenyl)methyl ester  
 224165-53-1P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (4-methoxyphenyl)methyl ester 224165-54-2P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 1,3-benzodioxol-5-ylmethyl ester  
 224165-55-3P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 [4-(1-methylethyl)phenyl]methyl ester 224165-56-4P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, [4-(trifluoromethyl)phenyl]methyl  
 ester 224165-57-5P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-  
 dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (3-fluorophenyl)methyl ester 224165-58-6P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, [4-(trifluoromethoxy)phenyl]methy  
 l ester 224165-59-7P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-  
 2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-  
 , cyclopropylphenylmethyl ester 224165-60-0P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, 1-phenylethyl ester  
 224165-61-1P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-,  
 (pentafluorophenyl)methyl ester 224165-62-2P, Carbamic acid,  
 [5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]phenyl]-, (2-fluorophenyl)methyl ester 224165-64-4P,  
 Carbamic acid, [5-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]phenyl]-, phenyl ester 224165-65-5P  
 , Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-,  
 (2-fluorophenyl)methyl ester 224165-66-6P, Carbamic acid,  
 [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-  
 pyrimidinyl]-5-fluoro-2-methylphenyl]-, phenyl ester 224165-67-7P,  
 Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-,

3,4-dimethylphenyl ester 224165-68-8P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (2-chlorophenyl)methyl ester 224165-69-9P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, 2,6-dimethylphenyl ester 224165-70-2P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (2-methylphenyl)methyl ester 224165-71-3P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, 2-phenylethyl ester 224165-72-4P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (2-methoxyphenyl)methyl ester 224165-73-5P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, 2,6-dimethoxyphenyl ester 224165-74-6P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (4-methylphenyl)methyl ester 224165-75-7P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (4-chlorophenyl)methyl ester 224165-77-9P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (2,4-dichlorophenyl)methyl ester 224165-78-0P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (3,4-dimethoxyphenyl)methyl ester 224165-79-1P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (4-nitrophenyl)methyl ester 224165-80-4P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (3-methoxyphenyl)methyl ester 224165-82-6P, Carbamothioic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, S-(phenylmethyl) ester 224165-84-8P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (3-nitrophenyl)methyl ester 224165-86-0P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (3-methylphenyl)methyl ester 224165-87-1P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, (2,4,6-trimethylphenyl)methyl ester 224165-88-2P, Carbamic acid, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methylphenyl]-, 2-furanylmethyl ester 224165-89-3P, 5H-Tetrazol-5-one, 1-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1,2-dihydro- 224165-90-6P, 5H-Tetrazol-5-one, 1-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-1,2-dihydro- 224165-91-7P, 5H-Tetrazol-5-one, 1-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-92-8P, 5H-Tetrazol-5-one, 1-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-93-9P, 5H-Tetrazol-5-one, 1-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-95-1P, 5H-Tetrazol-5-one, 1-(4,6-dichloro-3-methoxy-2-nitrophenyl)-1,2-dihydro- 224165-96-2P, 5H-Tetrazol-5-one, 1-(4,6-dichloro-3-methoxy-2-nitrophenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-97-3P, 5H-Tetrazol-5-one, 1-(4,6-dichloro-3-hydroxy-2-nitrophenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-98-4P, 5H-Tetrazol-5-one, 1-(2-amino-4,6-dichloro-3-hydroxyphenyl)-4-(3-fluoropropyl)-1,4-dihydro- 224165-99-5P, 5H-Tetrazol-5-one, 1-[2-amino-4,6-dichloro-3-(2-propynyloxy)phenyl]-4-(3-fluoropropyl)-1,4-dihydro- 224166-00-1P, 5H-Tetrazol-5-one, 1-[2-amino-4,6-dichloro-3-(1-methylethoxy)phenyl]-4-(3-fluoropropyl)-1,4-dihydro- 224166-01-2P, 5H-Tetrazol-5-one, 1-[2-amino-4-chloro-6-fluoro-3-(2-propynyloxy)phenyl]-4-(3-fluoropropyl)-1,4-dihydro- 224166-02-3P, 5H-Tetrazol-5-one, 1-[2-amino-4-chloro-6-fluoro-3-(1-methylethoxy)phenyl]-4-(3-fluoropropyl)-1,4-dihydro- 224166-03-4P, 2-Naphthalenecarboxamide,

N-[3-chloro-5-fluoro-6-[4-(3-fluoropropyl)-4,5-dihydro-5-oxo-1H-tetrazol-1-yl]-2-methoxyphenyl]- 224166-04-5P, 2-Naphthalenecarboxamide,  
N-[3-chloro-5-fluoro-6-[4-(3-fluoropropyl)-4,5-dihydro-5-oxo-1H-tetrazol-1-yl]-2-methoxyphenyl]-N-(2-naphthalenylcarbonyl)- 224166-05-6P,  
Acetamide, N-[3-chloro-5-fluoro-6-[4-(3-fluoropropyl)-4,5-dihydro-5-oxo-1H-tetrazol-1-yl]-2-methoxyphenyl]-2-(phenylmethoxy)- 224166-07-8P,  
3H-1,2,4-Triazol-3-one, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 224166-08-9P,  
3H-1,2,4-Triazol-3-one, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 224166-09-0P, Benzamide,  
N-[3,5-dichloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]-2,4-difluoro- 224166-10-3P, Benzamide,  
N-[3-chloro-6-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-5-fluoro-2-methoxyphenyl]-2,4-difluoro- 224166-11-4P,  
2-Naphthalenecarboxamide, N-[3-chloro-6-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-5-fluoro-2-methoxyphenyl]-224166-12-5P, 2-Naphthalenecarboxamide, N-[3,5-dichloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]-224166-13-6P, 2-Naphthalenecarboxamide, N-[3,5-dichloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-6-methoxyphenyl]- 224166-14-7P, Propanamide, N-[4,6-dichloro-3-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-2-nitrophenyl]- 224166-15-8P, Propanamide, N-[2-amino-4,6-dichloro-3-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]-224166-17-0P, 3H-1,2,4-Triazol-3-one, 2-(2,3-diamino-4,6-dichlorophenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 224166-18-1P,  
3H-1,2,4-Triazol-3-one, 2-(4-chloro-2-fluoro-6-nitrophenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 224166-19-2P,  
3H-1,2,4-Triazol-3-one, 2-(2-amino-4-chloro-6-fluorophenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 224166-20-5P, Benzamide,  
N-[5-chloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-3-fluorophenyl]-2,4-difluoro- 224166-21-6P,  
2-Naphthalenecarboxamide, N-[5-chloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-3-fluorophenyl]- 224166-22-7P,  
1H-Pyrazole, 4-chloro-3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-5-(trifluoromethyl)- 224166-23-8P, Benzenamine,  
3-chloro-6-[4-chloro-1-methyl-5-(trifluoromethyl)-1H-pyrazol-3-yl]-5-fluoro-2-methoxy- 224166-24-9P, 2-Naphthalenecarboxamide,  
N-[3-chloro-6-[4-chloro-1-methyl-5-(trifluoromethyl)-1H-pyrazol-3-yl]-5-fluoro-2-methoxyphenyl]- 224166-26-1P, 2-Propenamide,  
N-[3-chloro-6-[4-chloro-1-methyl-5-(trifluoromethyl)-1H-pyrazol-3-yl]-5-fluoro-2-methoxyphenyl]-3-phenyl-, (2E)- 224166-27-2P,  
1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-4,5,6,7-tetrahydro- 224166-28-3P, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-4,5,6,7-tetrahydro-224166-29-4P, 1H-Isoindole-1,3(2H)-dione, 2-[2-amino-4-chloro-6-fluoro-3-(2-propynyloxy)phenyl]-4,5,6,7-tetrahydro- 224166-30-7P,  
1H-Isoindole-1,3(2H)-dione, 2-[2-amino-4-chloro-6-fluoro-3-(1-methylethoxy)phenyl]-4,5,6,7-tetrahydro- 224166-31-8P,  
1H-Isoindole-1,3(2H)-dione, 2-[2-amino-4-chloro-3-(cyclopentyloxy)-6-fluorophenyl]-4,5,6,7-tetrahydro- 224166-32-9P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-4,5,6,7-tetrahydro-224166-33-0P, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-4,5,6,7-tetrahydro- 224166-34-1P, Benzamide,  
N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2-methoxyphenyl]-2,4-difluoro- 224166-35-2P, 2-Naphthalenecarboxamide,  
N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2-methoxyphenyl]- 224166-36-3P, Benzamide, N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2-(2-propynyloxy)phenyl]-2,4-difluoro- 224166-38-5P, Benzamide,  
N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2-(1-methylethoxy)phenyl]-2,4-difluoro- 224166-39-6P, Benzamide,  
N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-



2-methoxyphenyl]-4-ethenyl- 224166-40-9P, 2-Propenamide, N-[3-chloro-5-fluoro-6-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)-2-methoxyphenyl]-3-phenyl-, (2E)- 224166-41-0P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-2,6-dinitrophenyl)-4,5,6,7-tetrahydro- 224166-42-1P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-2-nitrophenyl)-4,5,6,7-tetrahydro- 224166-43-2P, 1H-Isoindole-1,3(2H)-dione, 2-(2,4-dinitrophenyl)-4,5,6,7-tetrahydro- 224166-44-3P, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chlorophenyl)-4,5,6,7-tetrahydro- 224166-45-4P, 2-Naphthalenecarboxamide, N-[5-chloro-2-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)phenyl]- 224166-46-5P, 1H-[1,2,4]Triazolo[1,2-a]pyridazine-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)tetrahydro- 224166-48-7P, 1H-[1,2,4]Triazolo[1,2-a]pyridazine-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)tetrahydro- 224166-49-8P, 1H-[1,2,4]Triazolo[1,2-a]pyridazine-1,3(2H)-dione, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)tetrahydro- 224166-50-1P, 1H-[1,2,4]Triazolo[1,2-a]pyridazin-1-one, 2-(4-chloro-2-nitrophenyl)hexahydro-3-thioxo- 224166-51-2P, 1H-[1,2,4]Triazolo[1,2-a]pyridazin-1-one, 2-(2-amino-4-chlorophenyl)hexahydro-3-thioxo- 224166-52-3P, 2-Naphthalenecarboxamide, N-[5-chloro-2-(tetrahydro-1-oxo-3-thioxo-1H-[1,2,4]triazolo[1,2-a]pyridazin-2(3H)-yl)phenyl]- 224166-53-4P, 2-Naphthalenecarboxamide, N-[3-chloro-5-fluoro-2-methoxy-6-(tetrahydro-1,3-dioxo-1H-[1,2,4]triazolo[1,2-a]pyridazin-2(3H)-yl)phenyl]- 224166-54-5P, Benzamide, N-[3-chloro-5-fluoro-2-methoxy-6-(tetrahydro-1,3-dioxo-1H-[1,2,4]triazolo[1,2-a]pyridazin-2(3H)-yl)phenyl]-2,4-difluoro- 224166-55-6P, 1H-[1,2,4]Triazolo[1,2-a]pyridazine-1,3(2H)-dione, 2-(4-chloro-2-nitrophenyl)tetrahydro- 224166-56-7P, 1H-[1,2,4]Triazolo[1,2-a]pyridazine-1,3(2H)-dione, 2-(2-amino-4-chlorophenyl)tetrahydro- 224166-57-8P, 2-Naphthalenecarboxamide, N-[5-chloro-2-(tetrahydro-1,3-dioxo-1H-[1,2,4]triazolo[1,2-a]pyridazin-2(3H)-yl)phenyl]- 224166-58-9P, 3(2H)-Pyridazinone, 2-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-5-(trifluoromethyl)- 224166-59-0P, 3(2H)-Pyridazinone, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-5-(trifluoromethyl)- 224166-61-4P, 3(2H)-Pyridazinone, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-5-(trifluoromethyl)- 224166-63-6P, 3(2H)-Pyridazinone, 2-[4-chloro-6-fluoro-3-methoxy-2-(methylamino)phenyl]-5-(trifluoromethyl)- 224166-64-7P, 2-Naphthalenecarboxamide, N-[3-chloro-5-fluoro-2-methoxy-6-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]phenyl]- 224166-65-8P, 3(2H)-Pyridazinone, 2-(2,4-dichloro-6-fluoro-3-methoxyphenyl)-5-(trifluoromethyl)- 224166-66-9P, Benzenepropanoic acid, .alpha.,3-dichloro-5-fluoro-2-methoxy-6-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-, ethyl ester 224166-67-0P, 3(2H)-Pyridazinone, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)-4-methyl-5-(trifluoromethyl)- 224166-69-2P, 3(2H)-Pyridazinone, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-4-methyl-5-(trifluoromethyl)- 224166-70-5P, 3(2H)-Pyridazinone, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)-4-methyl-5-(trifluoromethyl)- 224166-71-6P, 3(2H)-Pyridazinone, 2-[4-chloro-6-fluoro-3-methoxy-2-(methylamino)phenyl]-4-methyl-5-(trifluoromethyl)-

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 224166-72-7P, 2-Naphthalenecarboxamide, N-[3-chloro-5-fluoro-2-methoxy-6-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]phenyl]- 224166-73-8P, Imidazo[1,5-a]pyridin-1(5H)-one, 2-(4-chloro-6-fluoro-3-hydroxy-2-nitrophenyl)hexahydro-3-thioxo- 224166-74-9P, Imidazo[1,5-a]pyridin-1(5H)-one, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)hexahydro-3-thioxo- 224166-75-0P, Imidazo[1,5-a]pyridin-1(5H)-one, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)hexahydro-3-thioxo- 224166-76-1P, 2-Naphthalenecarboxamide, N-[3-chloro-5-fluoro-6-(hexahydro-1-oxo-3-thioxoimidazo[1,5-a]pyridin-2(3H)-yl)-2-methoxyphenyl]-

224166-77-2P, Imidazo[1,5-a]pyridine-1,3(2H,5H)-dione, 2-(4-chloro-2-nitrophenyl)tetrahydro- 224166-78-3P, Imidazo[1,5-a]pyridine-1,3(2H,5H)-dione, 2-(2-amino-4-chlorophenyl)tetrahydro- 224166-79-4P, 2-Naphthalenecarboxamide, N-[5-chloro-2-(hexahydro-1,3-dioxoimidazo[1,5-a]pyridin-2(3H)-yl)phenyl]- 224166-81-8P, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)- 224166-82-9P, 2-Naphthalenecarboxamide, N-[3-chloro-6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-5-fluoro-2-methoxyphenyl]- 224166-84-1P, Benzamide, N-[3-chloro-6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-5-fluoro-2-methoxyphenyl]-2,4-difluoro- 224166-85-2P, 2-Naphthalenecarboxamide, N-[5-chloro-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)phenyl]- 224166-86-3P, Benzenepropanoic acid, 3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester 224166-87-4P, 2-Propenoic acid, 3-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, ethyl ester, (2E)- 224166-88-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, methyl ester 224166-89-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester, (+)- 224166-90-9P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester, (-)- 224166-91-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, propyl ester, (+)- 224166-92-1P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, propyl ester, (-)- 224166-94-3P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, butyl ester, (+)- 224166-95-4P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, butyl ester, (-)- 224166-96-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, pentyl ester, (+)- 224166-97-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, pentyl ester, (-)- 224166-98-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, hexyl ester, (+)- 224166-99-8P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, hexyl ester, (-)- 224167-00-4P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-methylpropyl ester, (+)- 224167-01-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-methylpropyl ester, (-)- 224167-02-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 3-methylbutyl ester, (+)- 224167-03-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 3-methylbutyl ester, (-)- 224167-04-8P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 1,1-dimethylethyl ester 224167-05-9P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-propynyl ester, (+)- 224167-07-1P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-propynyl ester, (-)- 224167-08-2P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2,2,2-trifluoroethyl ester 224167-09-3P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-

methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2,2,3,3-tetrafluoropropyl ester 224167-10-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2,2,3,3,4,4,4-heptafluorobutyl ester, (+)- 224167-11-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2,2,3,3,4,4,4-heptafluorobutyl ester, (-)- 224167-12-8P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-methoxyethyl ester 224167-13-9P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-ethoxyethyl ester 224167-14-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-phenoxyethyl ester, (+)- 224167-15-1P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-phenoxyethyl ester, (-)- 224167-16-2P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-cyanoethyl ester 224167-17-3P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-bromoethyl ester, (+)- 224167-18-4P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, 2-bromoethyl ester, (-)- 224167-19-5P, Benzenepropanoic acid, .alpha.-bromo-3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester, (+)- 224167-20-8P, Benzenepropanoic acid, .alpha.-bromo-3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester, (-)- 224167-22-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, ethyl ester 224167-23-1P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, propyl ester 224167-24-2P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, butyl ester 224167-25-3P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, pentyl ester 224167-26-4P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, hexyl ester 224167-27-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 1-methylethyl ester 224167-28-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2-methylpropyl ester 224167-29-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, phenylmethyl ester 224167-30-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, ethenyl ester 224167-31-1P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2-propenyl ester 224167-32-2P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2-propynyl ester 224167-34-4P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2,2,3,3-tetrafluoropropyl ester 224167-35-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-,

2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester 224167-36-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2-methoxyethyl ester 224167-37-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, 2-(methylthio)ethyl ester 224167-38-8P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-.alpha.-methyl-, tetrahydro-2-furanyl ester 224167-39-9P, Butanedioic acid, 2-chloro-2-[[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]methyl]-, diethyl ester 224167-40-2P, Benzenepropanoic acid, .alpha.,3-dichloro-.alpha.-cyano-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy-, ethyl ester 224167-41-3P, Benzenepropanoic acid, .alpha.,5-dichloro-2-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-3-fluoro-, ethyl ester 224167-42-4P, Benzenepropanoic acid, .alpha.,3-dichloro-5-fluoro-2-methoxy-6-(tetrahydro-1,3-dioxo-1H-[1,2,4]triazolo[1,2-a]pyridazin-2(3H)-yl)-, ethyl ester 224167-43-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methyl-, ethyl ester, (+)- 224167-44-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methyl-, ethyl ester, (-)- 224167-45-7P, Benzenepropanoic acid, .alpha.,3-dichloro-5-fluoro-2-methoxy-6-[1-methyl-4,5-bis(trifluoromethyl)-1H-pyrazol-3-yl]-, ethyl ester 224167-46-8P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-benzoyl-4-chlorophenyl)-1-methyl-6-(trifluoromethyl)- 224167-47-9P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-2-[(1Z)-2-(2-naphthalenyl)ethenyl]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-49-1P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-2-[(1E)-2-(2-naphthalenyl)ethenyl]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-50-4P, Benzenepropanoic acid, .alpha.,5-dichloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-3-fluoro-, ethyl ester 224167-51-5P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-5-fluoro-2-methoxy-, ethyl ester 224167-52-6P, 2,4(1H,3H)-Pyrimidinedione, 3-(2,4-dichloro-3-ethoxy-6-fluorophenyl)-1-methyl-6-(trifluoromethyl)- 224167-53-7P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-ethoxy-5-fluoro-, ethyl ester, (+)- 224167-54-8P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-ethoxy-5-fluoro-, ethyl ester, (-)- 224167-55-9P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-ethoxy-5-fluoro-, propyl ester, (+)- 224167-56-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-2-ethoxy-5-fluoro-, propyl ester, (-)- 224167-57-1P, 2,4(1H,3H)-Pyrimidinedione, 3-[2,4-dichloro-6-fluoro-3-(1-methylethoxy)phenyl]-1-methyl-6-(trifluoromethyl)- 224167-59-3P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-(1-methylethoxy)-, ethyl ester, (+)- 224167-60-6P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-(1-methylethoxy)-, ethyl ester, (-)- 224167-61-7P, Benzenepropanoic acid, .alpha.-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-methyl-, ethyl ester 224167-62-8P, Benzenepropanoic acid, .alpha.-chloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-(methoxycarbonyl)-, propyl ester 224167-63-9P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,5-dimethyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-5-fluoro-2-methoxy-, propyl ester 224167-64-0P, Benzenepropanoic acid, .alpha.,3-dichloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxy- 224167-65-1P, Pyridine, 3-chloro-2-(4-chloro-6-fluoro-3-methoxy-2-

nitrophenyl)-5-(trifluoromethyl)- 224167-66-2P, Benzenamine, 3-chloro-6-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]-5-fluoro-2-methoxy-224167-69-5P, Cyclopropanecarboxylic acid, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazide 224167-70-8P, Benzoic acid, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazide 224167-71-9P, Benzoic acid, 2,4-difluoro-, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazide 224167-72-0P, 2-Naphthalenecarboxylic acid, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazide 224167-73-1P, Hydrazinecarboxylic acid, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, ethyl ester 224167-74-2P, Hydrazinecarboxylic acid, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-, phenyl ester 224167-75-3P, Hydrazinecarboxamide, 2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N-(2,4-difluorophenyl)- 224167-76-4P, Carbamic acid, [[2-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazino]carbonyl]methyl-, ethyl ester 224167-77-5P, 2-Propenal, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-78-6P, Cyclopropanecarboxaldehyde, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-79-7P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-[(1-methylethylidene)hydrazino]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-80-0P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-[(2-methoxy-1-methylethylidene)hydrazino]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-81-1P, Propanal, 3-(methylthio)-, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-82-2P, Benzeneacetaldehyde, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-83-3P, Butanoic acid, 3-[[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazono]-, ethyl ester 224167-85-5P, Benzeneacetaldehyde, .alpha.-methyl-, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-86-6P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-2-[(3,4-dihydro-2(1H)-naphthalenylidene)hydrazino]-6-fluoro-3-methoxyphenyl]-1-methyl-6-(trifluoromethyl)- 224167-87-7P, Benzaldehyde, 2,4-difluoro-, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-88-8P

, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]hydrazino]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-89-9P, 2-Naphthalenecarboxaldehyde, [3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]hydrazone 224167-90-2P, 2,4(1H,3H)-Pyrimidinedione, 3-(2,4-dichloro-6-hydroxyphenyl)-1-methyl-6-(trifluoromethyl)- 224167-92-4P, 2,4(1H,3H)-Pyrimidinedione, 3-(2,4-dichloro-6-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224167-94-6P, 2,4(1H,3H)-Pyrimidinedione, 3-[2,4-dichloro-6-[(2,4-difluorophenyl)methoxy]phenyl]-1-methyl-6-(trifluoromethyl)- 224167-95-7P, Benzoic acid, 2,4-difluoro-, 3,5-dichloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl ester 224167-96-8P, 2-Naphthalenecarboxylic acid, 3,5-dichloro-2-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]phenyl ester 224167-97-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-2-hydroxy-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)- 224167-98-0P, 2-Naphthalenecarboxylic acid, 3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-

(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl ester  
 224167-99-1P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-(methylthio)phenyl]-1-methyl-6-(trifluoromethyl)- 224168-00-7P,  
 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-[(1-methylethyl)thio]phenyl]-1-methyl-6-(trifluoromethyl)- 224168-01-8P,  
 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-3-methoxy-2-[(phenylmethyl)thio]phenyl]-1-methyl-6-(trifluoromethyl)- 224168-02-9P,  
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 224168-03-0P, 2,4(1H,3H)-Pyrimidinedione, 3-[4-chloro-6-fluoro-2-[(2-hydroxyethyl)thio]-3-methoxyphenyl]-1-methyl-6-(trifluoromethyl)-  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliant)

IT 224162-61-2P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-3-methyl-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224162-62-3P,  
 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluoro-3-methylphenyl)-1-methyl-6-(trifluoromethyl)-  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliant)

IT 75-30-9, Isopropyl iodide 75-45-6, Chlorodifluoromethane 100-53-8, Benzyl mercaptan 106-96-7, Propargyl bromide 137-43-9, Cyclopentyl bromide 372-29-2, Ethyl 3-amino-4,4,4-trifluorocrotonate 624-83-9, Methyl isocyanate 1489-69-6, Cyclopropanecarboxaldehyde 2243-83-6, 2-Naphthoyl chloride 2367-91-1, 1-Chloro-2,5-difluorobenzene 4023-34-1, Cyclopropanecarbonyl chloride 28162-63-2, 4-Chloro-2-nitrophenyl isocyanate 75458-17-2, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chlorophenyl)- 84478-41-1, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydro- 84478-72-8, 5-Amino-2-chloro-4-fluorophenol 91167-85-0, 4-Chloro-2-fluoro-5-methoxyaniline 97986-19-1, 3H-1,2,4-Triazol-3-one, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl- 98403-91-9, 5H-Tetrazol-5-one, 1-(4-chloro-2-fluoro-5-hydroxyphenyl)-4-(3-fluoropropyl)-1,4-dihydro- 114136-60-6, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-fluoro-5-hydroxyphenyl)-1-methyl-6-(trifluoromethyl)- 114136-62-8, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-fluoro-5-hydroxyphenyl)-6-(trifluoromethyl)- 114168-84-2, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-fluoro-5-methoxyphenyl)-6-(trifluoromethyl)- 116759-33-2, 4-Chloro-2-fluoro-5-methylphenyl 142624-20-2, 1H-Pyrazole, 4-chloro-3-(4-chloro-2-fluoro-5-methoxyphenyl)-1-methyl-5-(trifluoromethyl)- 188489-77-2, 3(2H)-Pyridazinone, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)-5-(trifluoromethyl)- 198777-73-0, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chloro-6-fluorophenyl)-1-methyl-6-(trifluoromethyl)- 224168-19-8, 2,4(1H,3H)-Pyrimidinedione, 3-(5-amino-4-chloro-2-fluorophenyl)-6-(trifluoromethyl)- 224168-20-1, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-2-isocyanato-3-methylphenyl)-1-methyl-6-(trifluoromethyl)-  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of heterocyclylbenzenes as herbicides and defoliant)

IT 578-28-9P, Benzene, 1-chloro-2,5-difluoro-4-nitro- 2613-30-1P, Benzenamine, 4-chloro-2,5-difluoro- 212904-07-9P, 2,4(1H,3H)-Pyrimidinedione, 3-(2-amino-4-chlorophenyl)-1-methyl-6-(trifluoromethyl)- 212904-42-2P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-nitrophenyl)-6-(trifluoromethyl)- 212904-43-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-2-nitrophenyl)-1-methyl-6-(trifluoromethyl)- 224168-05-2P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-2-fluoro-5-methoxyphenyl)- 224168-06-3P, 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)- 224168-07-4P, 1H-Isoindole-1,3(2H)-dione, 2-(2-amino-4-chloro-6-fluoro-3-methoxyphenyl)- 224168-08-5P, Benzenamine, 4-chloro-6-fluoro-3-methoxy-2-nitro- 224168-09-6P, Benzene,

1-chloro-5-fluoro-4-isocyanato-2-methoxy-3-nitro- 224168-10-9P,  
 1H-Isoindole-1,3(2H)-dione, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)-  
 224168-11-0P, Carbamic acid, (4-chloro-2,5-difluorophenyl)-, ethyl ester  
 224168-12-1P, Carbamic acid, (4-chloro-3,6-difluoro-2-nitrophenyl)-, ethyl  
 ester 224168-13-2P, Benzenamine, 4-chloro-3,6-difluoro-2-nitro-  
 224168-14-3P, Carbamic acid, [2-chloro-5-[3,6-dihydro-2,6-dioxo-4-  
 (trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenyl]-, ethyl ester  
 224168-15-4P, Carbamic acid, (4-chloro-2-fluoro-5-methylphenyl)-, phenyl  
 ester 224168-16-5P, Carbamic acid, (4-chloro-6-fluoro-3-methyl-2-  
 nitrophenyl)-, phenyl ester 224168-17-6P, 2,4(1H,3H)-Pyrimidinedione,  
 3-(4-chloro-6-fluoro-3-methyl-2-nitrophenyl)-6-(trifluoromethyl)-  
 224168-22-3P, 2,4(1H,3H)-Pyrimidinedione, 3-(4-chloro-6-fluoro-2-  
 isocyanato-3-methoxyphenyl)-1-methyl-6-(trifluoromethyl)-  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

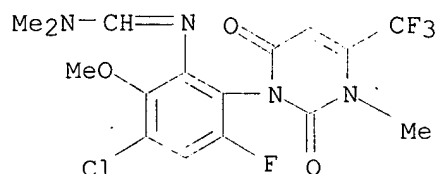
- (1) Agripat, S; FR 1499717 1967 HCAPLUS
- (2) Amuti; US 5602077 A 1997 HCAPLUS
- (3) Andree; US 5759957 A 1998 HCAPLUS
- (4) Anon; WO 8501939 1985 HCAPLUS
- (5) Anon; JP 03215476 1991 HCAPLUS
- (6) Anon; WO 9100278 1991 HCAPLUS
- (7) Anon; WO 9502580 1995 HCAPLUS
- (8) Anon; WO 9523509 1995 HCAPLUS
- (9) Anon; EP 705829 1996 HCAPLUS
- (10) Anon; JP 09301973 1997 HCAPLUS
- (11) Anon; WO 907104 1997
- (12) Anon; WO 9706150 1997 HCAPLUS
- (13) Anon; WO 9708170 1997 HCAPLUS
- (14) Anon; WO 9708171 1997 HCAPLUS
- (15) Anon; WO 9711060 1997 HCAPLUS
- (16) Anon; WO 97112883 1997
- (17) Anon; WO 9712886 1997 HCAPLUS
- (18) Anon; WO 9728127 1997 HCAPLUS
- (19) Anon; WO 9742188 1997 HCAPLUS
- (20) Brouwer; US 4927451 A 1990 HCAPLUS
- (21) Chernikov, A; FR 2476068 1981 HCAPLUS
- (22) Enomoto; US 5169431 A 1992 HCAPLUS
- (23) Enomoto; US 5281574 A 1994 HCAPLUS
- (24) Finger, G; J Am Chem Soc 1951, V73, P145 HCAPLUS
- (25) Hall; Journal of the American Chemical Societ 1967, V89(23), P5856 HCAPLUS
- (26) Ishii; US 5116404 A 1992 HCAPLUS
- (27) Kato, S; Journal of Heterocyclic Chemistry 1996, V33(4), P1171 HCAPLUS
- (28) Meegalla, S; Journal of Medicinal Chemistry 1994, V37(20), P3434 HCAPLUS
- (29) Satow; US 5356863 A 1994 HCAPLUS
- (30) Semple; US 4881967 A 1989 HCAPLUS
- (31) Takemura; US 5476834 A 1995 HCAPLUS
- (32) Theodoridis; US 5084085 A 1992 HCAPLUS
- (33) Theodoridis; US 5441925 A 1995 HCAPLUS
- (34) Wenger; US 4746352 A 1988 HCAPLUS
- (35) Wenger; US 4859229 A 1989 HCAPLUS
- (36) Wittek, P; Journal of Organic Chemistry 1979, V44(5), P870 HCAPLUS
- (37) Woddard; US 5281571 A 1994 HCAPLUS

IT 224162-57-6P, Methanimidamide, N'-[3-chloro-6-[3,6-dihydro-3-  
 methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-  
 methoxyphenyl]-N,N-dimethyl-

RL: AGR (Agricultural use); BSU (Biological study,  
 unclassified); BUU (Biological use, unclassified); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of heterocyclylbenzenes as herbicides and defoliants)

RN 224162-57-6 HCAPLUS

CN Methanimidamide, N'-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



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AN 2001:934012 HCAPLUS

DN 136:53758

TI Preparation of diaryl ethers as herbicides and desiccants

IN Pulman, David A.; Ying, Bai-ping; Wu, Shao-yong; Gupta, Sandeep; Shimoharada, Hiroshi; Tsukamoto, Masamitsu

PA Isk Americas Incorporated, USA

SO U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 947,900, abandoned.

CODEN: USXXAM

DT Patent

LA English

IC ICM C07D239-46

ICS C07D239-52; A01N043-54

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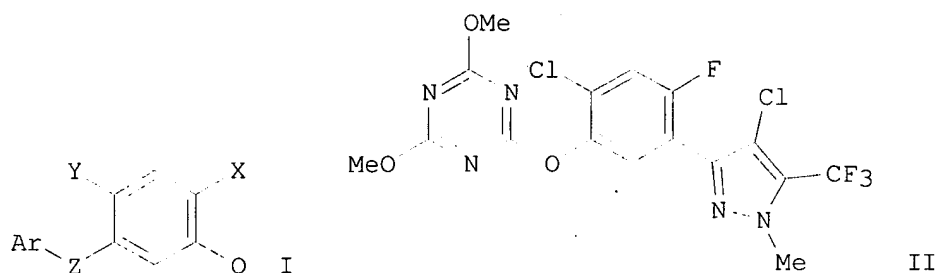
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6333296	B1	20011225	US 1999-380830	19990910 <--
	WO 9841093	A1	19980924	WO 1998-US209	19980114 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	ZA 9802158	A	19980914	ZA 1998-2158	19980313 <--
	US 2002161224	A1	20021031	US 2001-779674	20010209
	US 6479435	B2	20021112		
PRAI	US 1997-818061	B2	19970314		
	US 1997-917682	B2	19970826		
	US 1997-947900	B2	19971009		
	WO 1998-US209	W	19980114		
	US 1999-380830	A3	19990910		
OS	MARPAT 136:53758				
GI					





AB The diaryl ethers I [X, Y = H, halo, CN, NO<sub>2</sub>, haloalkyl; Z = O, S; Q = (un)substituted N-contg. heterocyclyl; Ar = (un)substituted aryl or heteroaryl] were prepd. as herbicides and desiccants. Thus, reacting 4-chloro-3-(4-chloro-2-fluoro-5-hydroxyphenyl)-1-methyl-5-trifluoromethyl-1H-pyrazole with 2-chloro-4,6-dimethoxytriazine in the presence of K<sub>2</sub>CO<sub>3</sub> in DMF afforded 82% II which showed complete damage of *Amaranthus retroflexus*, *Chenopodium album* and *Setaria viridis* at 500 g ai/ha in pre-emergence test.

ST diaryl ether prepn herbicide desiccant

IT Drying agents

Herbicides

(diaryl ethers)

IT 86798-19-8P 95149-79-4P 147217-52-5P 213677-71-5P 213677-72-6P  
 213677-73-7P 213677-75-9P 213677-76-0P 213677-78-2P 213677-79-3P  
 213677-80-6P 213677-81-7P 213677-83-9P 213677-84-0P 213677-86-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in prepn. of diaryl ether herbicides and desiccants)

IT 213675-78-6P 213675-79-7P 213675-80-0P 213675-81-1P 213675-82-2P  
 213675-83-3P 213675-84-4P 213675-85-5P 213675-86-6P 213675-87-7P  
 213675-88-8P 213675-90-2P 213675-91-3P 213675-92-4P 213675-93-5P  
 213675-94-6P 213675-96-8P 213675-98-0P 213676-00-7P 213676-03-0P  
 213676-04-1P 213676-06-3P 213676-09-6P 213676-11-0P 213676-12-1P  
 213676-13-2P 213676-14-3P 213676-16-5P 213676-18-7P 213676-20-1P  
 213676-22-3P 213676-23-4P 213676-24-5P 213676-25-6P 213676-26-7P  
 213676-28-9P 213676-29-0P 213676-31-4P 213676-32-5P 213676-33-6P  
 213676-35-8P 213676-36-9P 213676-37-0P 213676-39-2P 213676-40-5P  
 213676-42-7P 213676-44-9P 213676-45-0P 213676-46-1P 213676-47-2P  
 213676-48-3P 213676-49-4P 213676-50-7P 213676-51-8P 213676-52-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in prepn. of diaryl ethers herbicides and desiccants)

IT 213675-43-5 213675-44-6 213675-46-8 213675-47-9 213675-48-0  
 213675-49-1 213675-51-5 213675-52-6 213675-53-7 213675-54-8  
 213675-55-9 213675-57-1 213675-58-2 213675-59-3 213675-60-6  
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 213675-66-2 213675-67-3 213675-69-5 213675-70-8 213675-71-9  
 213675-72-0 213675-73-1 213675-74-2 213675-75-3 213675-76-4  
 213675-77-5 213676-53-0 213676-54-1 213676-55-2 213676-56-3  
 213676-57-4 213676-58-5 213676-60-9 213676-61-0 213676-62-1  
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 213676-80-3 213676-81-4 213676-82-5 213676-83-6 213676-84-7  
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213677-62-4	213677-63-5	213677-64-6	213677-65-7	213677-66-8
213677-67-9	213677-68-0			

RL: AGR (Agricultural use); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); USES (Uses) (prepn. as herbicide and desiccant)

IT 352-91-0, 1-Bromo-3-fluoropropane 372-29-2, Ethyl 3-amino-4,4,4-trifluorocrotonate 1722-12-9, 2-Chloropyrimidine 3140-73-6 5470-18-8, 2-Chloro-3-nitropyridine 17508-17-7, 2,4-Dinitrophenoxamine 20201-24-5, Ethyl 3-methyl-2-oxobutyrate 65753-47-1, 2-Chloro-3-trifluoromethylpyridine 70912-52-6 84478-38-6, 4-Chloro-2-fluoro-5-isopropoxyaniline 84478-72-8, 5-Amino-2-chloro-4-fluorophenol 85113-29-7, 4-Chloro-2-fluoro-5-isopropoxyphenyl isocyanate 114136-62-8 142625-52-3 213677-70-4 213677-74-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant in prepn. of diaryl ethers as herbicides and desiccants)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; JP 57197268 1982 HCAPLUS
- (2) Anon; DE 3240975 A 1983 HCAPLUS
- (3) Anon; WO 8801133 A 1988 HCAPLUS
- (4) Anon; JP 05202031 1993 HCAPLUS
- (5) Anon; JP 05202031 1993 HCAPLUS
- (6) Anon; JP 525173 1993
- (7) Anon; JP 539272 1993
- (8) Anon; JP 06256312 1994 HCAPLUS
- (9) Anon; EP 0648722 A 1995 HCAPLUS
- (10) Anon; WO 9602523 1996 HCAPLUS
- (11) Anon; WO 9607323 1996 HCAPLUS
- (12) Anon; WO 9608151 1996 HCAPLUS
- (13) Anon; WO 9614315 1996 HCAPLUS
- (14) Anon; WO 9624590 1996 HCAPLUS
- (15) Anon; DE 19527570 A 1997 HCAPLUS
- (16) Anon; DE 19615259 A 1997 HCAPLUS
- (17) Anon; CA 2227762 1997 HCAPLUS
- (18) Anon; WO 9827068 1998 HCAPLUS
- (19) Boger; US 4677127 1987 HCAPLUS
- (20) Enomoto; US 5280010 1994 HCAPLUS
- (21) Halling; US 5298502 1994 HCAPLUS
- (22) Hirai; US 4902337 1990 HCAPLUS
- (23) Kawamura; 1993 HCAPLUS
- (24) Kawamura; JP 05039272 1993 HCAPLUS
- (25) Moustafa; HCAPLUS
- (26) Nagano; US 4452981 1984 HCAPLUS
- (27) Poss; US 5125958 1992 HCAPLUS
- (28) Theodoridis; US 4985065 1991 HCAPLUS
- (29) Theodoridis, G; 1995 HCAPLUS
- (30) Watanabe; 1994 HCAPLUS
- (31) Wenger; 1988 HCAPLUS
- (32) Wenger; US 4859229 1989 HCAPLUS
- (33) Wenger; EP 255047 1998 HCAPLUS
- (34) Woodard; US 5281571 1994 HCAPLUS
- (35) Woodard; US 5489571 1996 HCAPLUS
- (36) Woodard; US 5496956 1996 HCAPLUS

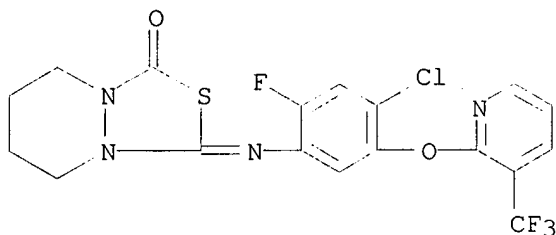
IT 213677-04-4

RL: AGR (Agricultural use); BSU (Biological study,

unclassified); MSC (Miscellaneous); BIOL (Biological study); USES (Uses)  
(prepn. as herbicide and desiccant)

RN 213677-04-4 HCAPLUS

CN 1H,3H-[1,3,4]Thiadiazolo[3,4-a]pyridazin-1-one, 3-[[4-chloro-2-fluoro-5-  
[[3-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]imino]tetrahydro- (9CI) (CA  
INDEX NAME)



L97 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:915240 HCAPLUS

DN 136:195583

TI 3-(Heterocyclyl)phenyl cyanurates: synthesis and herbicidal activity

AU Karp, Gary M.; Crews, A. Don; Manfredi, Mark C.; Kleemann, Axel; Arotin,  
Robert L.; Crawley, Matthew L.; Dahlke, Brian; Baerg, Roger

CS BASF Agro Research, Princeton, NJ, 08543-0400, USA

SO ACS Symposium Series (2002), 800 (Synthesis and Chemistry of Agrochemicals  
VI), 30-40

CODEN: ACSMC8; ISSN: 0097-6156

PB American Chemical Society

DT Journal

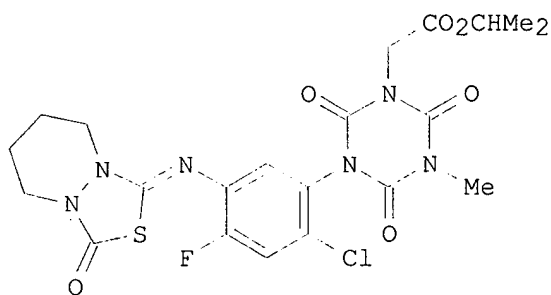
LA English

CC 5-3 (Agrochemical Bioregulators)

Section cross-reference(s): 28

OS CASREACT 136:195583

GI



I

AB 3-(Heterocyclyl)phenyl cyanurates such as I make up a novel class of  
protoporphyrinogen oxidase (protox) inhibitors which were prepd. and  
evaluated for herbicidal activity. The compds. were primarily  
postemergence broadleaf compds. The effect of changes in the aryl moiety,  
the heteroaryl moiety, and in the pendant ester of the cyanurate moiety on  
the herbicidal activity of the heterocyclylaryl cyanurates was studied.

ST heterocyclylphenyl cyanurate prepn herbicidal activity; structure  
heterocyclylphenyl cyanurate herbicidal activity

IT Structure-activity relationship

(herbicidal; prepn. and herbicidal activity of (heterocyclyl)phenyl  
cyanurate protoporphyrinogen oxidase inhibitors)

IT Herbicides  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 185382-58-5P  
RL: AGR (Agricultural use); RCT (Reactant); SPN (Synthetic preparation);  
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 185382-47-2P 185382-48-3P 185382-50-7P 185382-51-8P 185382-59-6P  
185382-60-9P 204383-93-7P 204383-94-8P 204383-99-3P  
204384-00-9P 204384-06-5P 204384-07-6P  
204384-08-7P 204384-19-0P 204384-20-3P  
401524-41-2P 401524-46-7P  
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 53986-32-6, Protoporphyrinogen oxidase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 96-32-2, Methyl bromoacetate 348-54-9, 2-Fluoroaniline 367-25-9,  
2,4-Difluoroaniline 372-29-2 445-28-3, 2-Fluorobenzamide 554-00-7,  
2,4-Dichloroaniline 694-06-4 1003-98-1, 2-Bromo-4-fluoroaniline  
1006-40-2, 2-Bromo-4-fluorobenzamide 2106-02-7, 2-Chloro-4-fluoroaniline  
2426-02-0 2447-79-2, 2,4-Dichlorobenzamide 15862-72-3 29921-57-1,  
Isopropyl bromoacetate 58729-31-0 84005-98-1 85118-02-1,  
2,4-Difluorobenzamide 88578-90-9, 2-Chloro-4-fluorobenzamide  
89990-53-4 204384-15-6 401524-44-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 5310-94-1P 13140-07-3P 39718-27-9P 185382-65-4P 185382-67-6P  
185382-68-7P 185382-69-8P 185382-70-1P 185382-71-2P 185382-72-3P  
185382-73-4P 185382-74-5P 185382-75-6P 185382-76-7P 185382-77-8P  
185382-78-9P 185382-79-0P 185382-83-6P 185382-84-7P 185382-85-8P  
185382-86-9P 185382-87-0P 185382-88-1P 185382-89-2P 204383-98-2P  
204384-10-1P 401524-33-2P 401524-34-3P 401524-35-4P 401524-36-5P  
401524-37-6P 401524-38-7P 401524-39-8P 401524-40-1P 401524-43-4P  
401524-45-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

IT 401524-42-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
protoporphyrinogen oxidase inhibitors)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Anderson, R; Porphyrin Pesticides; Chemistry, Toxicology and Pharmaceutical Applications, Symposium 559 1994, P18 HCAPLUS
- (2) Brouwer, W; US 4979982 1990 HCAPLUS
- (3) Brown, G; J Chem Soc Perkin Trans I 1985, P2577 HCAPLUS
- (4) Clark, R; Porphyrin Pesticides; Chemistry, Toxicology and Pharmaceutical Applications, Symposium 559 P33
- (5) Crews, A; US 5519133 1996 HCAPLUS
- (6) Crews, A; US 5679791 1997 HCAPLUS
- (7) Matringe, M; Pestic Biochem Physiol 1988, V32, P164 HCAPLUS
- (8) Pallett, K; Proceedings Brighton Crop Protection Conf-Weeds 1997, V7A, P575
- (9) Satow, J; US 5356863 1994 HCAPLUS
- (10) Satow, J; Synthesis and Chemistry of Agrochemicals, Symposium 584 1995,

V6, P100

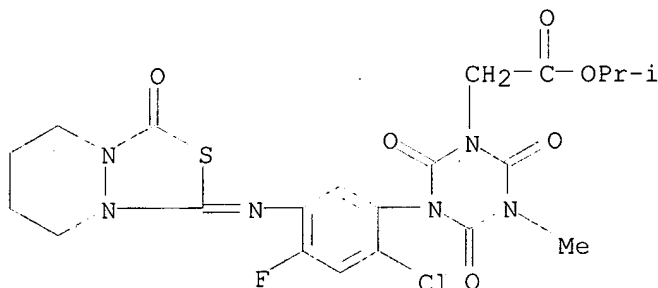
- (11) Uraguchi, R; J Pest Sci 1997, V22, P314 HCAPLUS  
 (12) Wakabayashi, K; Z Naturforsch 1995, V50c, P591  
 (13) Witkowski, D; Plant Physiol 1988, V86, P619

IT 185382-60-9P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and herbicidal activity of (heterocyclyl)phenyl cyanurate  
 protoporphyrinogen oxidase inhibitors)

RN 185382-60-9 HCAPLUS

CN 1,3,5-Triazine-1(2H)-acetic acid, 3-[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]tetrahydro-5-methyl-2,4,6-trioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:757844 HCAPLUS

DN 135:303879

TI Preparation of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine  
 and -amidine herbicidal agents

IN Karp, Gary Mitchell

PA American Cyanamid Co., USA

SO U.S., 103 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C07D239-02

ICS A01N043-54

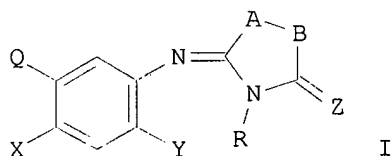
NCL 544319000

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6303783	B1	20011016	US 1999-368340	19990804 <--
	US 2002137929	A1	20020926	US 2001-930790	20010816
PRAI	US 1998-96448P	P	19980813		
	US 1999-368340	A3	19990804		
OS	MARPAT 135:303879				
GI					



AB The title compds. 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine, and -amidine I [X, Y = H, halo, NO<sub>2</sub>, cyano, alkyl, haloalkyl, S(O)mR<sub>1</sub>; R = H, alkyl, cycloalkyl, alkenyl, heterocyclyl, etc.; Z = O, S; Q = dioxodihydropyrimidinyl, oxothioxodihydropyrimidinyl], herbicides, were prepd. E.g. 3-{4-chloro-2-fluoro-5-[3-methyl-4-oxo-2-thiazolidinylideneamino]phenyl}-1-methyl-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione was prepd. Postemergence herbicidal activity of I was detd.

ST thiazolidinylidene pyrimidinedione prepn herbicide

IT Herbicides  
(postemergence; prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine and -amidine herbicidal agents)

IT 260976-89-4P 260976-90-7P 260976-91-8P  
260976-92-9P 260976-93-0P 260976-94-1P  
260977-34-2P 260978-84-5P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine and -amidine herbicidal agents)

IT 260976-95-2P 260976-96-3P 260976-97-4P  
260976-98-5P 260976-99-6P 260977-00-2P  
260977-01-3P 260977-02-4P 260977-03-5P  
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 260978-82-3P 260978-85-6P 260978-86-7P  
 366447-61-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine and -amidine herbicidal agents)

IT 57-06-7, Allyl isothiocyanate 67-64-1, Acetone, reactions 75-04-7, Ethanamine, reactions 75-31-0, 2-Propanamine, reactions 96-35-5, Methyl glycolate 107-10-8, 1-Propanamine, reactions 108-31-6, Maleic anhydride, reactions 109-85-3 399-35-9 406-34-8 535-11-5, Ethyl 2-bromopropionate 556-61-6, Methyl isothiocyanate 616-34-2 753-90-2 762-21-0, Diethyl acetylenedicarboxylate 1003-03-8, Cyclopentanamine 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 2516-34-9, Cyclobutanamine 3196-73-4, .beta.-Alanine methyl ester hydrochloride 3251-07-8 4650-60-6 6456-74-2 7524-50-7, L-Phenylalanine methyl ester hydrochloride 17702-11-3 18542-42-2 24066-82-8, Ethyl isothiocyanatoacetate 30389-17-4, 3-Butyn-2-amine 34033-44-8, 2,4-Dichloro-5-nitroaniline 35661-39-3D, resin bound 50917-72-1 57946-56-2, 4-Chloro-2-fluoroaniline 141860-79-9, 2-Dimethylamino-4-(trifluoromethyl)-6H-1,3-oxazin-6-one 366446-58-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine and -amidine herbicidal agents)

IT 59280-72-7P 86987-15-7P 86988-02-5P, 4-Chloro-2-fluoro-5-nitroaniline 86988-03-6P 114136-67-3P, 3-(4-Chloro-2-fluoro-5-nitrophenyl)-1-methyl-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 114136-68-4P, 3-(4-Chloro-2-fluoro-5-nitrophenyl)-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 114136-76-4P, 3-(5-Amino-4-chloro-2-fluorophenyl)-1-methyl-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 141716-19-0P, 3-(5-Amino-2,4-dichlorophenyl)-1-methyl-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 145740-42-7P 260978-88-9P 260978-99-2P 260979-00-8P 260979-01-9P 260979-21-3P 260979-22-4P 366446-59-5P, 3-(2,4-Dichloro-5-nitrophenyl)-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 366446-60-8P, 3-(2,4-Dichloro-5-nitrophenyl)-1-methyl-6-(trifluoromethyl)-2,4(1H,3H)-pyrimidinedione 366446-61-9P 366446-62-0P 366446-63-1P 366446-64-2P 366446-65-3P 366446-66-4P 366446-67-5P 366446-68-6P 366446-69-7P 366446-70-0P 366446-71-1P 366446-72-2P 366446-73-3P 366446-74-4P 366446-75-5P 366446-76-6P 366446-77-7P 366446-78-8P 366446-79-9P 366446-80-2P 366446-81-3P 366446-82-4P 366446-83-5P 366446-84-6P 366446-85-7P 366446-86-8P 366446-87-9P 366446-88-0P 366446-89-1P 366446-90-4P 366446-91-5P 366446-92-6P 366446-93-7P 366446-94-8P 366446-95-9P 366446-96-0P 366446-97-1P 366446-98-2P 366446-99-3P 366447-00-9P 366447-01-0P 366447-02-1P 366447-03-2P 366447-04-3P 366447-05-4P 366447-06-5P 366447-07-6P 366447-08-7P 366447-09-8P 366447-10-1P

366447-11-2P 366447-12-3P 366447-13-4P  
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366447-26-9P 366447-27-0P 366447-28-1P  
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366447-41-8P 366447-42-9P 366447-43-0P  
366447-44-1P 366447-45-2P 366447-46-3P  
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366447-50-9P 366447-51-0P 366447-52-1P  
366447-53-2P 366447-54-3P 366447-55-4P  
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366447-59-8P 366447-60-1P 366447-62-3P  
366447-65-6P 366447-66-7P 366447-67-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine  
and -amidine herbicidal agents)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Achary; 1976 HCAPLUS
- (2) Anon; EP 0270138 1979 HCAPLUS
- (3) Anon; EP 270138 1979 HCAPLUS
- (4) Anon; EP 3640 1979 HCAPLUS
- (5) Anon; DK 3505432 1985
- (6) Anon; JP 07304759 1994 HCAPLUS
- (7) Anon; EP 0745599 A2 1996 HCAPLUS
- (8) Chaudhary; 1969 HCAPLUS
- (9) Kloppe; US 3287466 1966 HCAPLUS
- (10) Rao; 1974 HCAPLUS
- (11) Singh; 1977 HCAPLUS
- (12) Vladzimirskaya; 1988 HCAPLUS
- (13) Wellinga; US 4854961 1989 HCAPLUS

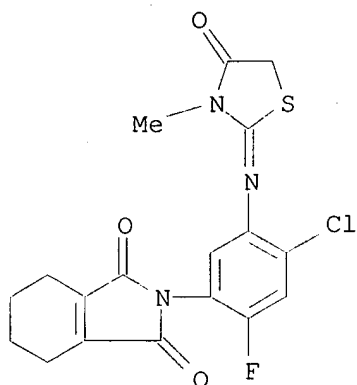
IT 260976-89-4P

RL: AGR (Agricultural use); BAC (Biological activity or  
effector, except adverse); BSU (Biological study, unclassified); RCT  
(Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP  
(Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of 1-(3-heterocyclylphenyl) isothiurea, -isourea, -guanidine  
and -amidine herbicidal agents)

RN 260976-89-4 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[4-chloro-2-fluoro-5-[(3-methyl-4-oxo-2-  
thiazolidinylidene)amino]phenyl]-4,5,6,7-tetrahydro- (9CI) (CA INDEX  
NAME)

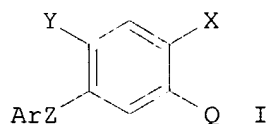




L97 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 2000:658481 HCAPLUS  
 DN 133:238025  
 TI Preparation of azinyl phenyl ethers as herbicides and plant desiccants.  
 IN Pulman, David A.; Ying, Bai-Ping; Wu, Shao-Yong; Gupta, Sandeep;  
 Tsukamoto, Masamitsu; Haga, Takahiro  
 PA Ishihara Sangyo Kaisha, Ltd., Japan  
 SO U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 151,306.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C07D231-20  
 ICS A01N043-56  
 NCL 504230000  
 CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6121201	A	20000919	US 1998-159233	19980923 <--
	US 6303543	B1	20011016	US 2000-570911	20000515
PRAI	US 1998-151306	A2	19980911		
	US 1998-159233	A3	19980923		
OS	MARPAT 133:238025				
GI					



AB Title compds. [I; X, Y = H, halo, cyano, NO<sub>2</sub>, haloalkyl; Z = O, S; Q = (substituted) pyrazolyl, imidazolyl, triazolyl, tetrazolyl, pyridazinyl, etc.; Ar = (substituted) aryl, heteroaryl], were prepd. Thus, 4-chloro-3-(4-chloro-2-fluoro-5-hydroxyphenyl)-1-methyl-5-trifluoromethyl-1H-pyrazole, 2-chloro-4,6-dimethoxytriazine, and K<sub>2</sub>CO<sub>3</sub> were stirred 2 h in DMF at 90.degree. to give 81.6% 4-chloro-3-[4-chloro-2-fluoro-5-(4,6-dimethoxy-2-triazinyloxy)phenyl]-1-methyl-5-trifluoromethyl-1H-pyrazole. Numerous I at 125-500 g/ha preemergent gave 100% control of Amaranthus retroflexus, Abutilon theophrasti, etc.

ST azinyl phenyl ether prepn herbicide plant desiccant; cotton desiccant azinyl phenyl ether; potato desiccant azinyl phenyl ether

IT Cotton  
Potato (*Solanum tuberosum*)  
(desiccants; prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT Corn  
(herbicides for corn crops; prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT Soybean (*Glycine max*)  
(herbicides for soybean crops; prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT Desiccants, plant  
Herbicides  
(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT 213675-46-8P 213677-63-5P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT 213675-43-5P 213675-44-6P 213675-47-9P 213675-48-0P 213675-49-1P  
213675-51-5P 213675-52-6P 213675-53-7P 213675-54-8P 213675-55-9P  
213675-57-1P 213675-58-2P 213675-59-3P 213675-60-6P 213675-61-7P  
213675-62-8P 213675-63-9P 213675-64-0P 213675-65-1P 213675-66-2P  
213675-67-3P 213675-69-5P 213675-70-8P 213675-71-9P 213675-72-0P  
213675-73-1P 213675-74-2P 213675-75-3P 213675-76-4P 213675-77-5P  
213676-53-0P 213676-54-1P 213676-55-2P 213676-56-3P 213676-57-4P  
213676-58-5P 213676-60-9P 213676-61-0P 213676-67-6P 213676-68-7P  
213676-69-8P 213676-70-1P 213676-71-2P 213676-72-3P 213676-75-6P  
213676-76-7P 213676-77-8P 213676-78-9P 213676-79-0P 213676-80-3P  
213676-81-4P 213676-82-5P 213676-83-6P 213676-84-7P 213676-86-9P  
213676-87-0P 213676-88-1P 213676-89-2P 213676-91-6P 213676-92-7P  
213676-94-9P 213676-96-1P 213677-00-0P 213677-01-1P 213677-02-2P  
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213677-24-8P 213677-25-9P 213677-27-1P 213677-28-2P 213677-29-3P  
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213677-58-8P 213677-59-9P 213677-60-2P 213677-61-3P 213677-62-4P  
213677-64-6P 213677-65-7P 213677-66-8P 213677-67-9P 213677-68-0P  
292856-04-3P 292856-05-4P 292856-06-5P 292856-07-6P 292856-09-8P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT 75-04-7, Ethylamine, reactions 75-45-6, Chlorodifluoromethane 88-73-3,  
2-Chloronitrobenzene 110-52-1, 1,4-Dibromobutane 352-91-0,  
1-Bromo-3-fluoropropane 372-29-2, Ethyl 3-amino-4,4,4-trifluorocrotonate  
431-67-4, 1,1-Dibromo-3,3,3-trifluoroacetone 535-11-5, Ethyl  
2-bromopropionate 1099-45-2 1722-12-9, 2-Chloropyrimidine 3140-73-6  
5470-18-8, 2-Chloro-3-nitropyridine 5740-50-1 17508-17-7 20201-24-5,  
Ethyl 3-methyl-2-oxobutyrate 65753-47-1, 2-Chloro-3-  
trifluoromethylpyridine 70912-52-6 84478-38-6, 4-Chloro-2-fluoro-5-  
isopropoxyaniline 84478-72-8, 5-Amino-2-chloro-4-fluorophenol  
85113-29-7 110956-96-2 114136-62-8 129631-56-7 142625-52-3  
156777-24-1 213677-74-8 292856-11-2 292856-12-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

IT 86798-19-8P 95149-79-4P 147217-52-5P 213675-78-6P 213675-79-7P  
 213675-80-0P 213675-81-1P 213675-82-2P 213675-83-3P 213675-84-4P  
 213675-85-5P 213675-86-6P 213675-87-7P 213675-88-8P 213675-90-2P  
 213675-91-3P 213675-92-4P 213675-93-5P 213675-94-6P 213675-96-8P  
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 213676-51-8P 213676-52-9P 213677-71-5P 213677-72-6P 213677-75-9P  
 213677-76-0P 213677-78-2P 213677-79-3P 213677-80-6P 213677-81-7P  
 213677-83-9P 213677-84-0P 213677-86-2P 292848-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; JP 57197268 1982 HCAPLUS
- (2) Anon; EP 0197495 B1 1986 HCAPLUS
- (3) Anon; JP 04225937 1992 HCAPLUS
- (4) Anon; JP 05202031 1993 HCAPLUS
- (5) Anon; JP 525173 1993
- (6) Anon; JP 06256312 1994 HCAPLUS
- (7) Anon; WO 9602523 A1 1996 HCAPLUS
- (8) Anon; WO 9607323 1996 HCAPLUS
- (9) Anon; WO 9608151 1996 HCAPLUS
- (10) Anon; WO 9728127 1997 HCAPLUS
- (11) Anon; EP 0885885 A1 1998 HCAPLUS
- (12) Anon; WO 9814452 1998 HCAPLUS
- (13) Anon; WO 9841093 1998 HCAPLUS
- (14) Cantegril; US 5945382 1999 HCAPLUS
- (15) Enomoto; US 5280010 1994 HCAPLUS
- (16) Halling; US 5298502 1994 HCAPLUS
- (17) Hirai; US 4902337 1990 HCAPLUS
- (18) Hirai; Scifinder 1998, P20
- (19) Kawamura; 1993 HCAPLUS
- (20) Miura; US 5032165 1991 HCAPLUS
- (21) Moustafa; 1984 HCAPLUS
- (22) Nagano; US 4452981 1984 HCAPLUS
- (23) Poss; US 5125958 1992 HCAPLUS
- (24) Singhbansal; US 5466662 1995 HCAPLUS
- (25) Theodoridis; US 4985065 1991 HCAPLUS
- (26) Theodoridis; US 5861359 1999 HCAPLUS
- (27) Watanabe; 1994 HCAPLUS
- (28) Wenger; 1988 HCAPLUS
- (29) Wenger; US 4859229 1989 HCAPLUS
- (30) Wolf; US 4213773 1980 HCAPLUS
- (31) Woodard; US 5496956 1996 HCAPLUS

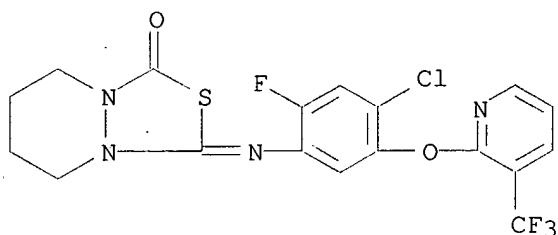
IT 213677-04-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of azinyl Ph ethers as herbicides and plant desiccants)

RN 213677-04-4 HCAPLUS

CN 1H,3H-[1,3,4]Thiadiazolo[3,4-a]pyridazin-1-one, 3-[[4-chloro-2-fluoro-5-[[3-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]imino]tetrahydro- (9CI) (CA INDEX NAME)



L97 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:175534 HCAPLUS

DN 132:222542

TI Preparation of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides

IN Karp, Gary Mitchell

PA American Cyanamid Company, USA

SO Eur. Pat. Appl., 303 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C07D417-12

ICS C07D417-14; C07D413-12; A01N043-76; A01N043-78

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 985670	A1	20000315	EP 1999-306382	19990812 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1998-133872		19980813		
OS	MARPAT 132:222542				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; X, Y = H, halo, NO<sub>2</sub>, etc.; R = H, alkyl, cycloalkyl, etc.; Z = O, S; A = O, S, SO, SO<sub>2</sub>, etc.; B = CR<sub>37</sub>R<sub>38</sub>(CR<sub>39</sub>R<sub>40</sub>), C(:T), C(:CR<sub>41</sub>R<sub>42</sub>); (wherein R<sub>37</sub>-R<sub>40</sub> = H, halo, alkyl, etc.; T = O, S, NH, etc.; R<sub>41</sub>, R<sub>42</sub> = H, alkyl, haloalkyl, etc.); Q = II-IV, etc. (wherein D, D1 = O, S; E = H, halo, alkoxy, etc.; R<sub>43</sub>, R<sub>44</sub> = H, halo, alkyl, etc.; R<sub>45</sub>, R<sub>46</sub> = H, halo, alkyl, etc.)], useful for the control of undesirable plant species, were prepd. E.g., a multi-step synthesis of the title compd. V was given. Biol. data for compds. I were presented.

ST herbicide heterocyclylphenylisothiourea heterocyclylphenylisourea heterocyclylphenylguanidine heterocyclylphenylamidine prepn

IT Herbicides

(prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides)

IT 260977-23-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(319prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides)

IT 260976-89-4P 260976-90-7P 260976-91-8P  
260976-92-9P 260976-93-0P 260976-94-1P  
260976-95-2P 260976-96-3P 260976-97-4P  
260976-98-5P 260976-99-6P 260977-00-2P  
260977-01-3P 260977-02-4P 260977-03-5P  
260977-04-6P 260977-05-7P 260977-06-8P  
260977-07-9P 260977-08-0P 260977-09-1P  
260977-10-4P 260977-11-5P 260977-12-6P  
260977-13-7P 260977-14-8P 260977-15-9P  
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260977-22-8P 260977-24-0P 260977-25-1P  
260977-26-2P 260977-27-3P 260977-28-4P  
260977-29-5P 260977-30-8P 260977-31-9P  
260977-32-0P 260977-33-1P 260977-34-2P  
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260977-38-6P 260977-39-7P 260977-40-0P  
260977-41-1P 260977-42-2P 260977-43-3P  
260977-44-4P 260977-45-5P 260977-47-7P  
260977-48-8P 260977-49-9P 260977-50-2P  
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260977-54-6P 260977-55-7P 260977-56-8P  
260977-57-9P 260977-58-0P 260977-59-1P  
260977-60-4P 260977-61-5P 260977-62-6P  
260977-63-7P 260977-64-8P 260977-65-9P  
260977-66-0P 260977-67-1P 260977-68-2P  
260977-69-3P 260977-70-6P 260977-71-7P  
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260978-89-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines

and -amidines as herbicides)

IT 67-64-1, Acetone, reactions 108-31-6, Maleic anhydride, reactions 399-35-9 762-21-0, Diethyl acetylenedicarboxylate 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 3196-73-4, .beta.-Alanine methyl ester hydrochloride 7524-50-7, L-Phenylalanine methyl ester hydrochloride 24066-82-8, Ethyl isothiocyanatoacetate 34033-44-8, Benzenamine, 2,4-Dichloro-5-nitro- 35661-39-3D, Wang resin-supported 57946-56-2, 4-Chloro-2-fluoroaniline 141860-79-9 **260979-25-7**  
**260979-26-8 260979-27-9**

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides)

IT 59280-72-7P 86987-15-7P 86988-02-5P, 4-Chloro-2-fluoro-5-nitroaniline 86988-03-6P 260978-90-3P 260978-91-4P 260978-92-5P 260978-93-6P 260978-94-7P 260978-95-8P 260978-96-9P 260978-97-0P 260978-98-1P 260978-99-2P 260979-00-8P 260979-01-9P 260979-02-0P 260979-03-1P 260979-04-2P 260979-05-3P 260979-06-4P 260979-07-5P 260979-08-6P 260979-09-7P 260979-10-0P 260979-11-1P 260979-12-2P 260979-13-3P 260979-14-4P 260979-15-5P 260979-16-6P 260979-17-7P 260979-18-8P 260979-19-9P 260979-20-2P 260979-21-3P 260979-22-4P 260979-23-5P 260979-24-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Achary, T; J Indian Chem Soc 1975, V52(11), P1065 HCAPLUS
- (2) Duphar International Research B V; EP 0270138 A 1988 HCAPLUS
- (3) Sumitomo Chem Co, Ltd; JP 07304759 A 1996 HCAPLUS

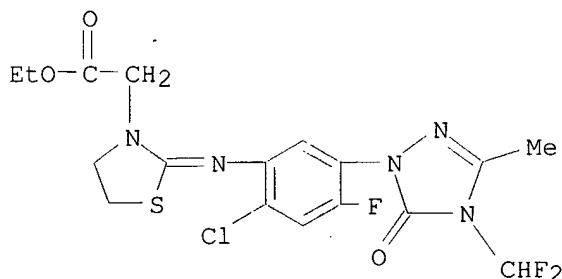
IT **260977-23-9P**

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(319prepn. of 1-(3-heterocyclylphenyl)isothioureas, -isoureas, -guanidines and -amidines as herbicides)

RN 260977-23-9 HCAPLUS

CN 3-Thiazolidineacetic acid, 2-[[2-chloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorophenyl]imino]-, ethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:297407 HCAPLUS

DN 130:338118

TI Preparation of heterocyclylbenzenes as herbicides and defoliants.

IN Gupta, Sandeep; Tsukamoto, Masamitsu; Pulman, David A.; Ying, Bai-ping; Wu, Shao-yong

PA ISK Americas Incorporated, USA

SO PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D221-02

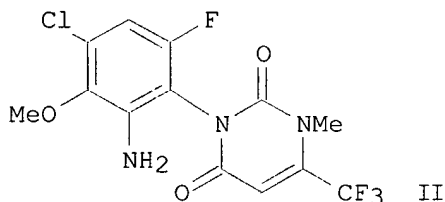
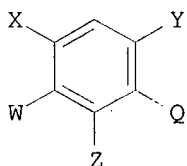
ICS C07D471-02; C07D491-02; C07D498-02; C07D211-70; C07D211-72;  
 C07D211-82; C07D211-84; C07D213-62; C07D213-54; C07D213-44;  
 C07D237-26; C07D237-28; C07D487-00; C07D401-00; C07D403-00;  
 C07D239-02; C07D241-36; C07D471-00; C07D241-02

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9921837	A1	19990506	WO 1998-US17197	19980821 <--
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ZA 9809639	A	19990426	ZA 1998-9639	19981022 <--
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PRAI US 1997-958313	A2	19971027		
WO 1998-US17197	W	19980821		
US 2000-530373	A3	20000427		
OS MARPAT 130:338118				
GI				



AB Title compds. [I; X = H, halo, NO<sub>2</sub>, amino, NHR, NR<sub>2</sub>, amide, thioamide, cyano, alkylcarbonyl, alkoxy carbonyl, alkylsulfonamide, (substituted) alkyl, haloalkyl, alkoxy, haloalkoxy, alkoxy carbonyloxy, PhCH<sub>2</sub>O, aryloxy, heteroaryloxy; Y = H, halo, NO<sub>2</sub>; W = H, OR, SR, NHR, NR<sub>2</sub>, CH<sub>2</sub>R, CHR<sub>2</sub>, CR<sub>3</sub>, halo, NO<sub>2</sub>, cyano; R = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, alkoxy, cycloalkoxy, aryloxy, heteroaryloxy, alkylsulfonyl, PhCH<sub>2</sub>, alkylcarbonyl, aryloxy carbonyl, etc.; Q = (substituted) heterocyclyl; Z = amino, OH, SH, CHO, CO<sub>2</sub>H, cyano, alkylcarbonyl, arylcarbonyl, N<sub>3</sub>, etc.], were prepd. Thus, 3-(4-chloro-6-fluoro-3-methoxy-2-nitrophenyl)-1-methyl-6-trifluoromethyl-2,4(1H,3H)-pyrimidinedione (prepn. given) was stirred with Fe powder in HOAc to give title compd. (II). II at 7.8g/ha postemergent gave 100%

control of *Amaranthus retroflexus* and *Abutilon theophrasti*.

ST heterocyclylbenzene prepn herbicide defoliant; pyrimidinedione prepn herbicide defoliant; tetrazolone prepn herbicide defoliant; triazolone prepn herbicide defoliant; pyrazole 1 prepn herbicide; phthalimide prepn herbicide; pyridiazinone prepn herbicide

IT Defoliants  
Herbicides  
(prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 212755-09-4P 224162-61-2P 224162-62-3P 224163-11-5P 224163-76-2P  
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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 212755-06-1P 212755-08-3P 212902-22-2P 212904-47-7P 212904-48-8P  
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RL: AGR (Agricultural use); BAC (Biological activity or



effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 75-30-9, Isopropyl iodide 75-45-6, Chlorodifluoromethane 100-53-8, Benzyl mercaptan 106-96-7, Propargyl bromide 137-43-9, Cyclopentyl bromide 372-29-2, Ethyl 3-amino-4,4,4-trifluorocrotonate 624-83-9, Methyl isocyanate 1489-69-6, Cyclopropanecarboxaldehyde 2243-83-6, 2-Naphthoyl chloride 2367-91-1, 1-Chloro-2,5-difluorobenzene 4023-34-1, Cyclopropanecarbonyl chloride 28162-63-2, 4-Chloro-2-nitrophenyl isocyanate 75458-17-2 84478-41-1 84478-72-8, 5-Amino-2-chloro-4-fluorophenol 91167-85-0, 4-Chloro-2-fluoro-5-methoxyaniline 97986-19-1 98403-91-9 114136-60-6 114136-62-8 114168-84-2 116759-33-2, 4-Chloro-2-fluoro-5-methylaniline 142624-20-2 188489-77-2 198777-73-0 224168-19-8 224168-20-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

IT 578-28-9P 2613-30-1P 212904-07-9P 212904-42-2P 212904-43-3P  
224168-05-2P 224168-06-3P 224168-07-4P 224168-08-5P 224168-09-6P  
224168-10-9P 224168-11-0P 224168-12-1P 224168-13-2P 224168-14-3P  
224168-15-4P 224168-16-5P 224168-17-6P 224168-22-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heterocyclylbenzenes as herbicides and defoliants)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

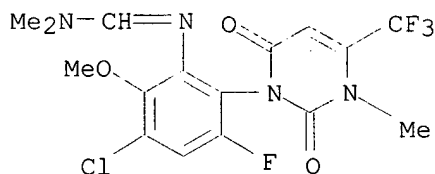
- (1) Agripat, S; FR 1499717 1967 HCAPLUS
- (2) Basf Aktiengesellschaft; WO 9712883 A1 1997 HCAPLUS
- (3) Chernikov, A; FR 2476068 1981 HCAPLUS
- (4) Finger, G; J Am Chem Soc 1951, V73, P145 HCAPLUS
- (5) Hall, J; Journal of the American Chemical Society 1967, V89(23), P5856 HCAPLUS
- (6) Ishii; US 5116404 A 1992 HCAPLUS
- (7) Kato, S; Journal of Heterocyclic Chemistry 1996, V33(4), P1171 HCAPLUS
- (8) Meegalla, S; Journal of Medicinal Chemistry 1994, V37(20), P3434 HCAPLUS
- (9) Semple; US 4881967 A 1989 HCAPLUS
- (10) Sumitomo Chemical Company Limited; WO 97/07104 A1 1997 HCAPLUS
- (11) Wittek, P; Journal of Organic Chemistry 1979, V44(5), P870 HCAPLUS
- (12) Woodard; US 5281571 A 1994 HCAPLUS

IT 224162-57-6P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of heterocyclylbenzenes as herbicides and defoliants)

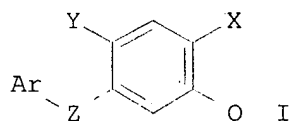
RN 224162-57-6 HCAPLUS

CN Methanimidamide, N'-[3-chloro-6-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-5-fluoro-2-methoxyphenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



AN 1998:635622 HCAPLUS  
 DN 129:256468  
 TI Preparation of diaryl ethers as herbicides and desiccants  
 IN Pulman, David A.; Ying, Bai-ping; Wu, Shao-yong; Gupta, Sandeep;  
 Shimoharada, Hiroshi; Tsukamoto, Masamitsu  
 PA Ishihara Sangyo Kaisha Americas, Inc., USA  
 SO PCT Int. Appl., 130 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A01N043-40  
 ICS A01N043-48; A01N043-50; A01N043-54; A01N043-56; A01N043-58;  
 A01N043-653; A01N043-713; A01N043-76; A01N043-78; C07D401-12;  
 C07D403-12; C07D417-12  
 CC 5-3 (Agrochemical Bioregulators)  
 Section cross-reference(s): 28  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9841093	A1	19980924	WO 1998-US209	19980114	<--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9858161	A1	19981012	AU 1998-58161	19980114	<--
	AU 737360	B2	20010816			
	EP 973395	A1	20000126	EP 1998-901704	19980114	<--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO				
	BR 9808334	A	20000516	BR 1998-8334	19980114	<--
	JP 2001519783	T2	20011023	JP 1998-540479	19980114	<--
	RU 2180336	C2	20020310	RU 1999-122033	19980114	<--
	ZA 9802158	A	19980914	ZA 1998-2158	19980313	<--
	US 6333296	B1	20011225	US 1999-380830	19990910	<--
	US 2002161224	A1	20021031	US 2001-779674	20010209	
	US 6479435	B2	20021112			
PRAI	US 1997-818061	A2	19970314			
	US 1997-917682	A2	19970826			
	US 1997-947900	A2	19971009			
	WO 1998-US209	W	19980114			
	US 1999-380830	A3	19990910			
OS	MARPAT 129:256468					
GI						



AB The diaryl ethers I [X, Y = H, halo, cyano, nitro or C1-6 haloalkyl; Z = O or S; Q = (un)substituted N-contg. heterocyclyl; Ar = (un)substituted aryl or heterocyclyl] are prepd. as herbicides and desiccants.  
 ST diaryl ether prepn herbicide desiccant  
 IT Desiccants, plant  
 Herbicides

(diaryl ethers)

IT 86798-19-8P 95149-79-4P 147217-52-5P 213677-71-5P 213677-72-6P  
 213677-73-7P 213677-75-9P 213677-76-0P 213677-78-2P 213677-79-3P  
 213677-80-6P 213677-81-7P 213677-83-9P 213677-84-0P 213677-86-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(intermediate in prepn. of diaryl ether herbicides and desiccants)

IT 213675-78-6P 213675-79-7P 213675-80-0P 213675-81-1P 213675-82-2P  
 213675-83-3P 213675-84-4P 213675-85-5P 213675-86-6P 213675-87-7P  
 213675-88-8P 213675-90-2P 213675-91-3P 213675-92-4P 213675-93-5P  
 213675-94-6P 213675-96-8P 213675-98-0P 213676-00-7P 213676-03-0P  
 213676-04-1P 213676-06-3P 213676-09-6P 213676-11-0P 213676-12-1P  
 213676-13-2P 213676-14-3P 213676-16-5P 213676-18-7P 213676-20-1P  
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 213676-28-9P 213676-29-0P 213676-31-4P 213676-32-5P 213676-33-6P  
 213676-35-8P 213676-36-9P 213676-37-0P 213676-39-2P 213676-40-5P  
 213676-42-7P 213676-44-9P 213676-45-0P 213676-46-1P 213676-47-2P  
 213676-48-3P 213676-49-4P 213676-50-7P 213676-51-8P 213676-52-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(intermediate in prepn. of diaryl ethers herbicides and desiccants)

IT 213675-43-5P 213675-44-6P 213675-46-8P 213675-47-9P 213675-48-0P  
 213675-49-1P 213675-51-5P 213675-52-6P 213675-53-7P 213675-54-8P  
 213675-55-9P 213675-57-1P 213675-58-2P 213675-59-3P 213675-60-6P  
 213675-61-7P 213675-62-8P 213675-63-9P 213675-64-0P 213675-65-1P  
 213675-66-2P 213675-67-3P 213675-69-5P 213675-70-8P 213675-71-9P  
 213675-72-0P 213675-73-1P 213675-74-2P 213675-75-3P 213675-76-4P  
 213675-77-5P 213676-53-0P 213676-54-1P 213676-55-2P 213676-56-3P  
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 213676-92-7P 213676-94-9P 213676-96-1P 213677-00-0P 213677-01-1P  
 213677-02-2P 213677-03-3P **213677-04-4P 213677-05-5P**  
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 213677-13-5P 213677-14-6P 213677-15-7P 213677-16-8P 213677-17-9P  
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 213677-35-1P 213677-36-2P 213677-37-3P 213677-38-4P 213677-39-5P  
 213677-40-8P 213677-41-9P 213677-42-0P 213677-43-1P 213677-44-2P  
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 213677-56-6P 213677-58-8P 213677-59-9P 213677-60-2P 213677-61-3P  
 213677-62-4P 213677-63-5P 213677-64-6P 213677-65-7P 213677-66-8P  
 213677-67-9P 213677-68-0P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)

(prepn. as herbicide and desiccant)

IT 352-91-0, 1-Bromo-3-fluoropropane 372-29-2, Ethyl 3-amino-4,4,4-  
 trifluorocrotonate 1722-12-9, 2-Chloropyrimidine 3140-73-6  
 5470-18-8, 2-Chloro-3-nitropyridine 17508-17-7, 2,4-Dinitrophenoxamine  
 20201-24-5, Ethyl 3-methyl-2-oxobutyrate 65753-47-1,  
 2-Chloro-3-trifluoromethylpyridine 70912-52-6 84478-38-6,  
 4-Chloro-2-fluoro-5-isopropoxyaniline 84478-72-8, 5-Amino-2-chloro-4-  
 fluorophenol 85113-29-7, 4-Chloro-2-fluoro-5-isopropoxyphenyl isocyanate  
 114136-62-8 142625-52-3 213677-70-4 213677-74-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant in prepn. of diaryl ethers as herbicides and desiccants)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

(1) Kawamura; JP 05039272 1993 HCAPLUS

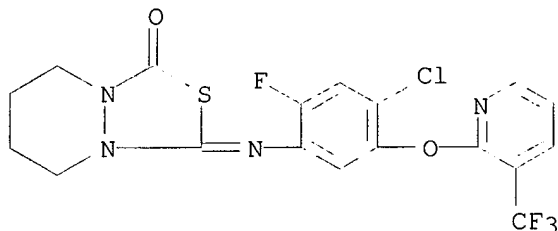
(2) Wenger; EP 255047 1988 HCAPLUS

IT 213677-04-4P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prepn. as herbicide and desiccant)

RN 213677-04-4 HCAPLUS

CN 1H,3H-[1,3,4]Thiadiazolo[3,4-a]pyridazin-1-one, 3-[[4-chloro-2-fluoro-5-  
[[3-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]imino]tetrahydro- (9CI) (CA  
INDEX NAME)



L97 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:572286 HCAPLUS

DN 129:199315

TI Preparation of herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates

IN Theodoridis, George

PA USA

SO U.S., 27 pp., Cont.-in-part of U.S. 5,674,810.

CODEN: USXXAM

DT Patent

LA English

IC ICM A01N043-54

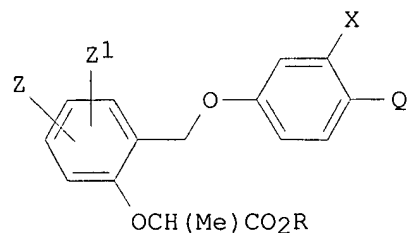
NCL 504136000

CC 5-3 (Agrochemical Bioregulators)

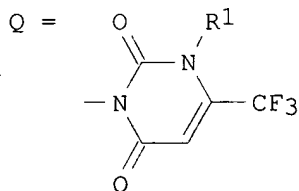
Section cross-reference(s): 28

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5798316	A	19980825	US 1997-865306	19970529 <--
	US 5262390	A	19931116	US 1992-935601	19920826 <--
	US 5344812	A	19940906	US 1993-107560	19930817 <--
	US 5674810	A	19971007	US 1995-523991	19950905 <--
PRAI	US 1992-935601	A2	19920826		
	US 1993-107560	A2	19930817		
	US 1995-523991	A2	19950905		
OS	MARPAT 129:199315				
GI					



I



AB Herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates, optionally in combination with other herbicides, are disclosed. The herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates are I [R = H, (un)substituted lower alkyl, cycloalkyl, lower alkenyl or lower alkynyl, Na, K, NH<sub>4</sub>, etc.; R<sub>1</sub> = lower alkyl, lower haloalkyl, lower cyanoalkyl, lower alkoxyalkyl, lower alkoxyacetylalkyl, lower arylalkyl or amino; X = H, Me, F or Cl; Z = H, F, Cl, Br, lower alkyl or methoxy; Z<sub>1</sub> = H, F or Cl; ZZ<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>; m = 0, 1, 2; n = 1-6]. I are both pre- and postemergent herbicides. The prepn. of I is given. I can be used with either grass-controlling or broadleaf herbicides.

ST herbicide phenoxyethylphenoxyalkanoate deriv prepn

IT Herbicides

(phenoxyethylphenoxyalkanoate derivs.)

IT 399-95-1P, 4-Amino-3-fluorophenol 49754-15-6P, Malonyldiurethane  
68285-84-7P 70044-34-7P 70129-95-2P 115256-63-8P 119162-25-3P  
127350-93-0P 127350-94-1P 127350-95-2P 127350-96-3P 145348-98-7P  
154079-76-2P 154079-77-3P 154079-79-5P 154079-80-8P 154079-81-9P  
154079-91-1P, 2-Fluoro-4-methoxyphenyl isocyanate 154079-92-2P  
154079-93-3P 154079-94-4P 154079-95-5P 154079-96-6P 154079-97-7P  
154079-98-8P 154079-99-9P 154080-00-9P, 2-Fluoro-4-  
methoxyphenylhydrazine 154080-04-3P, 4-Isopropoxy-2-fluoroaniline  
154080-05-4P 154080-06-5P 154080-07-6P 154080-08-7P 154080-09-8P  
154080-10-1P 154080-11-2P 154080-12-3P 154080-13-4P 154080-14-5P  
154080-15-6P 154080-16-7P 154080-17-8P 154080-18-9P 154080-20-3P  
154080-21-4P 158756-11-7P 158756-13-9P 158756-14-0P 158756-15-1P  
158756-16-2P 161876-65-9P 161876-66-0P 161876-67-1P 188359-70-8P  
188359-76-4P 211927-41-2P 211927-42-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in prepn. of phenoxyethylphenoxyalkanoate deriv. herbicides)

IT 154079-74-0P 154079-78-4P 154079-82-0P 154079-83-1P 154079-84-2P  
154079-85-3P 154079-88-6P 154079-89-7P **154079-90-0P**  
154080-29-2P 154080-44-1P 154080-45-2P 154080-46-3P 154080-47-4P  
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154080-53-2P 154080-54-3P 154080-55-4P 154080-56-5P 154080-57-6P  
154080-58-7P 154080-61-2P 154080-62-3P 154080-63-4P 154080-64-5P  
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211927-25-2P 211927-26-3P 211927-27-4P 211927-28-5P 211927-29-6P  
211927-30-9P 211927-31-0P 211927-32-1P 211927-33-2P 211927-34-3P  
211927-36-5P 211927-37-6P 211927-38-7P 211927-39-8P 211927-40-1P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. as herbicide)

IT 51-79-6, Ethyl carbamate 68-12-2, N,N-Dimethylformamide, reactions  
75-45-6, Chlorodifluoromethane 100-83-4, 3-Hydroxybenzaldehyde  
127-17-3, Pyruvic acid, reactions 141-82-2, Propanedioic acid, reactions  
352-11-4, 4-Fluorophenylmethyl chloride 352-91-0, 1-Bromo-3-  
fluoropropane 372-29-2, Ethyl 3-Amino-4,4,4-trifluorocrotonate

394-41-2, 3-Fluoro-4-nitrophenol 458-52-6, 2-Fluoro-4-methoxyaniline  
 503-38-8, Trichloromethyl chloroformate 623-33-6, Glycine ethyl ester  
 hydrochloride 698-27-1, 4-Methylsalicylaldehyde 1655-07-8, Ethyl  
 2-cyclohexanonecarboxylate 2420-26-0, 4-Chlorosalicylaldehyde  
 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 5445-17-0, Methyl  
 2-bromopropionate 26386-88-9, Diphenylphosphoryl azide 28987-50-0  
 70044-33-6 127350-92-9, 2-Fluoro-4-nitrophenyl hydrazine 161876-64-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant in prepn. of phenoxyethylphenoxyalkanoate deriv. herbicides)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

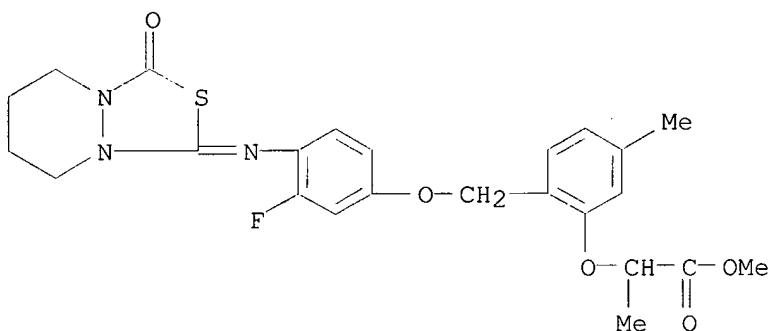
(1) Theodoridis; US 5344812 1994 HCAPLUS

IT 154079-90-0P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. as herbicide)

RN 154079-90-0 HCAPLUS

CN Propanoic acid, 2-[2-[[3-fluoro-4-[(tetrahydro-3-oxo-1H,3H-  
 [1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenoxy]methyl]-5-  
 methylphenoxy]-, methyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:178149 HCAPLUS

DN 128:217387

TI Preparation of 1-(3-heterocyclyphenyl)-s-triazine-2,4,6-triones and  
 related compounds as herbicides.

IN Crews, Alvin Donald, Jr.; Harrington, Philip Mark; Karp, Gary Mitchell;  
 Manfredi, Mark Christopher; Guaciaro, Michael Anthony

PA American Cyanamid Co., USA

SO U.S., 69 pp., Cont.-in-part of U.S. Ser. No. 459,868.

CODEN: USXXAM

DT Patent

LA English

IC ICM C07D251-34

ICS A01N043-66

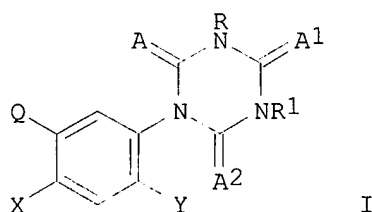
NCL 504227000

CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5726126	A	19980310	US 1996-756750	19961126 <--
PRAI	US 1995-459868	A2	19950602		
OS	MARPAT 128:217387				
GI					



AB Title compds. [I; X, Y = H, halo, NO<sub>2</sub>, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, SOMR<sub>2</sub>; m = 0-2; R = H, alkyl, alkoxyalkyl, alkylcarbonylalkyl, haloalkylcarbonyl, alkoxyalkyl, alkynyl, alkali metal, (substituted) Ph, PhCH<sub>2</sub>; R<sub>1</sub> = H, alkenyl, alkynyl, cyano, (substituted) alkyl, Ph; R<sub>2</sub> = alkyl, haloalkyl, (substituted) Ph, PhCH<sub>2</sub>; A, A<sub>1</sub>, A<sub>2</sub> = O, S; Q = specified heterocyclyl], were prepd. Thus, 1-(5-amino-2-chloro-4-fluorophenyl)-3-methyl-s-triazine-2,4,6(1H,3H,5H)-trione was heated with 3,4,5,6-tetrahydrophthalic anhydride in HOAc at 100.degree. for 8 h to give 1-[4-chloro-2-fluoro-5-(hexahydro-3-methyl-2,4,6-trioxo-s-triazin-1-yl)phenyl]-1-cyclohexene-1,2-dicarboximide. Several I at 0.500 kg/ha postemergent gave 100% control of *Abutilon theophrasti* and *Ambrosia artemisiifolia*.

ST heterocyclylphenyltriazinetriene prepn herbicide; triazinetriene heterocyclylphenyl prepn herbicide

IT Herbicides

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related compds. as herbicides)

IT 204384-11-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related compds. as herbicides)

IT 185382-46-1P 185382-47-2P 185382-48-3P 185382-49-4P 185382-50-7P  
 185382-51-8P 185382-52-9P 185382-53-0P 185382-54-1P 185382-55-2P  
 185382-56-3P 185382-57-4P 185382-58-5P 185382-59-6P  
**185382-60-9P** 185382-61-0P 185382-62-1P 185382-63-2P  
 185382-77-8P 185382-78-9P 185382-79-0P 198418-22-3P 204383-93-7P  
 204383-94-8P 204383-97-1P **204383-99-3P** 204384-00-9P  
 204384-01-0P 204384-02-1P **204384-03-2P** **204384-04-3P**  
**204384-06-5P** **204384-07-6P** **204384-08-7P**  
**204384-09-8P** **204384-16-7P** **204384-17-8P**  
**204384-18-9P** **204384-19-0P** **204384-20-3P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related compds. as herbicides)

IT 60-23-1, 2-Aminoethanethiol 74-89-5, Methylamine, reactions 75-30-9, 2-Iodopropane 106-95-6, Allyl bromide, reactions 106-96-7, Propargyl bromide 110-52-1, 1,4-Dibromobutane 302-01-2, Hydrazine, reactions 367-25-9, 2,4-Difluoroaniline 463-71-8, Thiophosgene 624-83-9, Methyl isocyanate 652-39-1 766-39-2, 2,3-Dimethylmaleic anhydride 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 3674-13-3, Ethyl 2,3-dibromopropionate 4114-28-7, 1,2-Bis(ethoxycarbonyl)hydrazine 5292-43-3, tert-Butyl bromoacetate 15862-72-3, Ethyl pipercolate 16686-11-6, 2-(3-Chloropropyl)-1,3-dioxolane 27738-96-1, Carbonisocyanatidic chloride 29921-57-1, Isopropyl bromoacetate 57946-56-2, 4-Chloro-2-fluoroaniline 65303-82-4, 4-Fluoro-3-nitrophenyl isocyanate 86987-15-7 88578-90-9, 2-Chloro-4-fluorobenzamide



124072-89-5 126264-49-1 185382-86-9 185382-87-0 185382-88-1  
 185382-91-6 204384-12-3 204384-13-4 204384-14-5  
 204384-15-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related  
 compds. as herbicides)

IT 694-06-4P 39718-27-9P 52944-50-0P 58729-31-0P 59280-72-7P  
 86988-03-6P 89990-53-4P 185382-65-4P 185382-66-5P 185382-67-6P  
 185382-68-7P 185382-69-8P 185382-70-1P 185382-71-2P 185382-72-3P  
 185382-73-4P 185382-74-5P 185382-75-6P 185382-76-7P 185382-80-3P  
 185382-81-4P 185382-82-5P 185382-83-6P 185382-89-2P 185382-92-7P  
 185382-94-9P 204383-95-9P 204383-96-0P 204383-98-2P 204384-05-4P  
 204384-10-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related  
 compds. as herbicides)

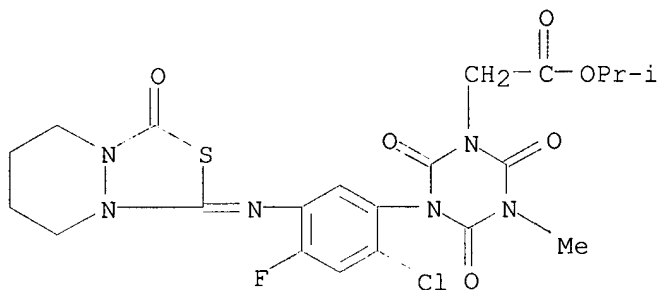
IT 185382-60-9P

RL: AGR (Agricultural use); BAC (Biological activity or  
 effector, except adverse); BSU (Biological study, unclassified); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-triones and related  
 compds. as herbicides)

RN 185382-60-9 HCAPLUS

CN 1,3,5-Triazine-1(2H)-acetic acid, 3-[2-chloro-4-fluoro-5-[(tetrahydro-3-  
 oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-  
 ylidene)amino]phenyl]tetrahydro-5-methyl-2,4,6-trioxo-, 1-methylethyl  
 ester (9CI) (CA INDEX NAME)



L97 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:31166 HCAPLUS

DN 128:102104

TI Preparation of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as  
 herbicides.

IN Crews, Alvin Donald, Jr.; Harrington, Philip Mark; Karp, Gary Mitchell;  
 Manfredi, Mark Christopher; Guaciaro, Michael Anthony

PA American Cyanamid Co., USA

SO U.S., 50 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C07D251-34

NCL 544222000

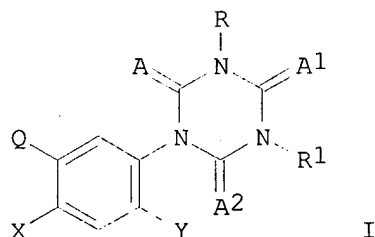
CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI US 5705644 A 19980106 US 1996-690270 19960724 <--  
 US 5872253 A 19990216 US 1997-896254 19970717 <--  
 PRAI US 1995-459567 A3 19950602  
 US 1996-690270 A3 19960724  
 OS MARPAT 128:102104  
 GI



AB Title compds. [I; X, Y = H, halo, NO<sub>2</sub>, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, etc.; Q = specified 5-6 membered heterocyclyl; R = H, alkyl, alkoxyalkyl, alkylcarbonylalkyl, alkenyl, alkynyl, alkali metal, (substituted) Ph, PhCH<sub>2</sub>; R<sub>1</sub> = H, alkenyl, alkynyl, cyano, (substituted) alkyl, Ph; A, A<sub>1</sub>, A<sub>2</sub> = O, S], were prep'd. Thus, Me 3-[2-chloro-5-(1-cyclohexene-1,2-dicarboximido)-4-fluorophenyl]tetrahydro-5-methyl-2,4,6-trioxo-s-triazine-1(2H)-acetate (prepn. given) at 0.125 kg/ha postemergent gave 100% control of Abutilon theophrasti.

ST heterocyclylphenyltriazinetriene prep'n herbicide; triazinetriene heterocyclylphenyl prep'n herbicide

IT Herbicides

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as herbicides)

IT 185382-46-1P 185382-47-2P 185382-48-3P 185382-49-4P 185382-50-7P  
 185382-51-8P 185382-52-9P 185382-53-0P 185382-54-1P 185382-55-2P  
 185382-56-3P 185382-57-4P 185382-58-5P 185382-59-6P  
**185382-60-9P** 185382-61-0P 185382-62-1P 185382-63-2P  
 185382-64-3P 185382-77-8P 185382-78-9P 185382-79-0P 185382-89-2P  
 185382-94-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as herbicides)

IT 60-23-1, 2-Aminoethanethiol 75-30-9, 2-Iodopropane 106-96-7, Propargyl bromide 110-52-1, 1,4-Dibromobutane 367-25-9, 2,4-Difluoroaniline 623-33-6, Glycine ethyl ester hydrochloride 635-08-5, 3,4,5,6-Tetrahydrophthalic acid 652-39-1, 3-Fluorophthalic anhydride 1476-23-9, Allyl isocyanate 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 2450-71-7, Propargylamine 3674-13-3, Ethyl 2,3-dibromopropionate 4114-28-7, 1,2-Dicarbethoxyhydrazine 5292-43-3, tert-Butyl bromoacetate 27738-96-1, Carbonisocyanatidic chloride 29921-57-1, Isopropyl bromoacetate 57946-56-2, 4-Chloro-2-fluoroaniline 65303-82-4, 4-Fluoro-3-nitrophenyl isocyanate 88578-90-9, 2-Chloro-4-fluorobenzamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as herbicides)

IT 39718-27-9P 52944-50-0P 58729-31-0P 59280-70-5P 59280-72-7P  
 86987-15-7P 86988-03-6P 89990-53-4P, Hexahydropyridazine hydrochloride  
 95635-45-3P 95635-47-5P 185382-65-4P 185382-66-5P 185382-67-6P  
 185382-68-7P 185382-69-8P 185382-70-1P 185382-71-2P 185382-72-3P

185382-73-4P 185382-74-5P 185382-75-6P 185382-76-7P 185382-80-3P  
 185382-81-4P 185382-82-5P 185382-83-6P 185382-84-7P 185382-85-8P  
 185382-86-9P 185382-87-0P 185382-88-1P 185382-90-5P 185382-91-6P  
 185382-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as herbicides)

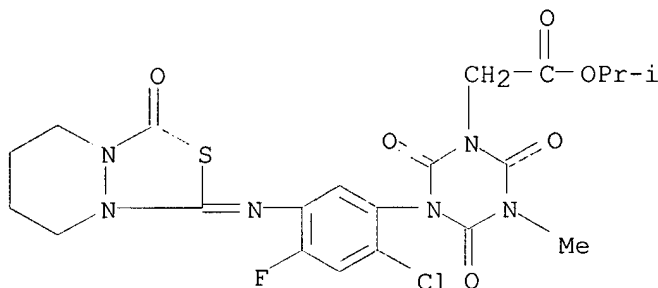
IT 185382-60-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-tri(thi)ones as herbicides)

RN 185382-60-9 HCAPLUS

CN 1,3,5-Triazine-1(2H)-acetic acid, 3-[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]tetrahydro-5-methyl-2,4,6-trioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:689564 HCAPLUS

DN 127:358879

TI Preparation of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents

IN Crews, Alvin Donald, Jr.; Karp, Gary Mitchell; Manfredi, Mark Christopher; Guaciaro, Michael Anthony

PA American Cyanamid Company, USA

SO U.S., 49 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C07D251-34

NCL 544222000

CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5679791	A	19971021	US 1996-686288	19960725 <--
PRAI	US 1996-686288		19960725		
OS	CASREACT 127:358879; MARPAT 127:358879				
GI					

AB The title compds. [I; R = H, C1-6 alkyl, C2-12 alkoxyalkyl, etc.; R1 = H, C3-6 alkenyl, C3-6 alkynyl, etc.; R11, R12 = H, (un)substituted C1-6 alkyl, C3-6 cycloalkyl; R11R12 = (un)substituted 4-7 membered (un)satd. ring optionally interrupted by O, S(O)r, or N; A, A1, A2 = O, S; r = 0-2; X, Y = H, halo, NO2, CN], useful for the control of undesirable plant species, were prepd. by reacting an isothiocyanate II with a hydrazine R12NHNHR11 followed by reaction of the resulting intermediate III with phosgene or a phosgene equiv. in the presence of a base. Thus, the title compd. IV showed 100% efficacy against, e.g., common lambsquarters in preemergence test at 0.125 kg/ha.

ST herbicide heterocyclylphenyltrioxotriazine heterocyclylphenyltrithioxotriazine prepn; heterocyclization thiadiazole formation

IT Herbicides

Heterocyclization

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents)

IT 185382-46-1P 185382-47-2P 185382-48-3P 185382-49-4P 185382-50-7P  
185382-51-8P 185382-52-9P 185382-53-0P 185382-54-1P 185382-55-2P  
185382-56-3P 185382-57-4P 185382-58-5P 185382-59-6P  
**185382-60-9P** 185382-61-0P 185382-62-1P 185382-63-2P  
185382-64-3P 185382-77-8P 185382-78-9P 185382-79-0P 198418-22-3P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents)

IT 75-30-9, 2-Iodopropane 106-96-7, Propargyl bromide 110-52-1  
367-25-9, 2,4-Difluoroaniline 623-33-6, Glycine ethyl ester  
hydrochloride 652-39-1, 3-Fluorophthalic anhydride 1476-23-9, Allyl  
isocyanate 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 2450-71-7,  
Propargylamine 3674-13-3, Ethyl 2,3-dibromopropionate 4114-28-7,  
1,2-Dicarbethoxyhydrazine 5292-43-3, tert-Butyl bromoacetate  
29921-57-1, Isopropyl bromoacetate 57946-56-2, 4-Chloro-2-fluoroaniline  
65303-82-4, 4-Fluoro-3-nitrophenyl isocyanate 88578-90-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents)

IT 39718-27-9P 52944-50-0P 58729-31-0P 59280-70-5P 59280-72-7P  
86987-15-7P 86988-03-6P 89990-53-4P 95635-45-3P 95635-47-5P  
185382-65-4P 185382-66-5P 185382-67-6P 185382-68-7P 185382-69-8P  
185382-70-1P 185382-71-2P 185382-72-3P 185382-73-4P 185382-74-5P  
185382-75-6P 185382-76-7P 185382-80-3P 185382-81-4P 185382-82-5P  
185382-83-6P 185382-84-7P 185382-85-8P 185382-86-9P 185382-87-0P  
185382-88-1P 185382-89-2P 185382-90-5P 185382-91-6P 185382-92-7P  
185382-94-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents)

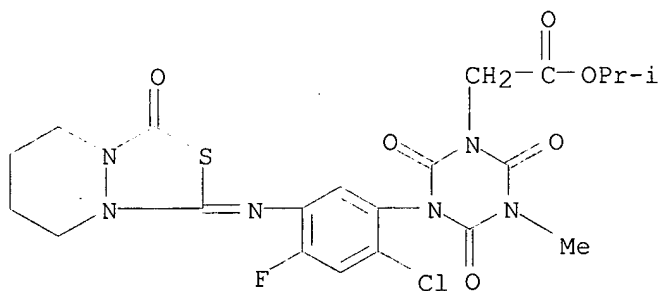
IT **185382-60-9P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo- or -thiotrione herbicidal agents)

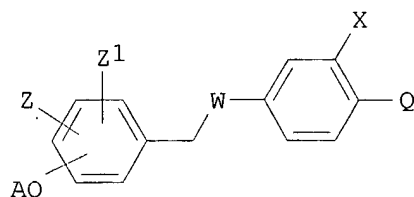
RN 185382-60-9 HCAPLUS

CN 1,3,5-Triazine-1(2H)-acetic acid, 3-[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]tetrahydro-5-methyl-2,4,6-trioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1997:248022 HCAPLUS  
 DN 126:221749  
 TI Preparation of herbicidal 2-[(4-heterocyclic-phenoxy)methyl]phenoxy]alkanoates  
 IN Theodoridis, George  
 PA FMC Corp., USA  
 SO PCT Int. Appl., 90 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A01N043-54  
 ICS C07D239-54  
 CC 5-2 (Agrochemical Bioregulators)  
 Section cross-reference(s): 28  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9708953	A1	19970313	WO 1996-US14193	19960905 <--
	W:				
	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
	US 5674810	A	19971007	US 1995-523991	19950905 <--
	AU 9670140	A1	19970327	AU 1996-70140	19960905 <--
PRAI	US 1995-523991	A	19950905		
	WO 1996-US14193	W	19960905		
OS	MARPAT 126:221749				
GI					



I

AB The title herbicidal compds. are I [A = alkanoate deriv. bonded to the phenoxy O at the .alpha.-C; Q = 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-on-1-yl, 3,4,5,6-tetrahydrophthalimid-1-yl, 1-(1-methylethyl)imidazolidin-2,4-dion-3-yl, 1,4-dihydro-4-(3-

fluoropropyl)-5H-tetrazol-5-on-1-yl, 3-chloro-4,5,6,7-tetrahydroindazol-2-yl, 4-methyl-1,2,4-triazine-3,5-dion-2-yl, 8-thia-1,6-diazabicyclo[4.3.0]nonane-7-on-9-ylimino or 1-methyl-6-trifluoromethyl-2,4-pyrimidinedione-3-yl; X = H, Me, F or Cl; W = O or S; Z = H, F, Cl, Br, lower alkyl, or methoxy; Z1 = H, F or Cl; AO may be in the 2-, 3-, or 4-position of the Ph ring].

ST herbicide heterocyclic phenoxymethylphenoxyalkanoate deriv prepn

IT Herbicides

(4-methylsalicylaldehyde)

IT 399-95-1P, 4-Amino-3-fluorophenol 68285-84-7P 154079-77-3P  
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(intermediate in prepn. of herbicidal heterocyclic phenoxymethylphenoxyalkanoates)

IT 49754-15-6P, Malonyldiurethane 70044-34-7P 70129-95-2P 115256-63-8P  
119162-25-3P 127350-93-0P 127350-94-1P 127350-95-2P 127350-96-3P  
154079-76-2P 154079-79-5P 154079-80-8P 154079-81-9P 154079-91-1P  
154079-92-2P 154079-93-3P 154079-94-4P 154079-96-6P 154079-97-7P  
154079-98-8P 154079-99-9P 154080-00-9P, 2-Fluoro-4-methoxyphenylhydrazine 154080-04-3P, 4-Isopropoxy-2-fluoroaniline  
154080-05-4P 154080-07-6P 154080-08-7P 154080-09-8P 154080-10-1P  
154080-11-2P 154080-12-3P 154080-13-4P 154080-15-6P 154080-16-7P  
154080-17-8P 154080-18-9P 154080-20-3P 154080-21-4P 158756-11-7P  
158756-13-9P 158756-14-0P 158756-15-1P 158756-16-2P 188359-69-5P  
188359-70-8P 188359-76-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in prepn. of herbicidal heterocyclic phenoxymethylphenoxyalkanoates)

IT 154079-74-0P 154079-78-4P 154079-82-0P 154079-83-1P 154079-84-2P  
154079-85-3P 154079-86-4P 154079-87-5P 154079-88-6P 154079-89-7P  
**154079-90-0P** 154080-29-2P 154080-44-1P 154080-45-2P  
154080-46-3P 154080-47-4P 154080-48-5P 154080-49-6P 154080-50-9P  
154080-51-0P 154080-52-1P 154080-53-2P 154080-54-3P 154080-55-4P  
154080-56-5P 154080-57-6P 154080-58-7P 154080-61-2P 154080-62-3P  
154080-63-4P 154080-64-5P 154080-82-7P 154080-83-8P 154080-84-9P  
154080-85-0P 154080-89-4P 154080-90-7P 154080-91-8P 158755-44-3P  
158755-45-4P 158755-46-5P 158755-47-6P 158755-48-7P 158755-49-8P  
158755-50-1P 158755-51-2P 158755-52-3P 158755-53-4P 158755-54-5P  
158755-55-6P 158755-56-7P 158755-57-8P 158755-58-9P 158755-59-0P  
158755-60-3P 158755-61-4P 158755-62-5P 158755-63-6P 158755-64-7P  
158755-65-8P 158755-66-9P 158755-67-0P 158755-68-1P 158755-69-2P  
158755-70-5P 158755-71-6P 158755-72-7P 158755-73-8P 158755-74-9P  
158755-75-0P 158755-76-1P 158755-77-2P 158755-78-3P 158755-79-4P  
158755-80-7P 158755-81-8P 158755-82-9P 158755-83-0P 158755-84-1P  
158755-85-2P 158755-86-3P 158755-87-4P 158755-88-5P 158755-89-6P  
158755-90-9P 158755-91-0P 158755-92-1P 158755-93-2P 158755-94-3P  
158755-95-4P 158755-96-5P 158755-97-6P 158755-98-7P 158755-99-8P  
158756-00-4P 158756-01-5P 158756-02-6P 158756-03-7P 158756-04-8P  
158756-05-9P 158756-06-0P 158756-07-1P 158756-08-2P 158756-09-3P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. as herbicide)

IT 96-32-2, Methyl bromoacetate 100-83-4, 3-Hydroxybenzaldehyde 123-08-0,  
4-Hydroxybenzaldehyde 127-17-3, reactions 352-11-4,  
4-Fluorophenylmethyl chloride 352-91-0, 1-Bromo-3-fluoropropane  
394-41-2, 3-Fluoro-4-nitrophenol 458-52-6, 2-Fluoro-4-methoxyaniline  
503-38-8, Trichloromethyl chloroformate 623-33-6, Glycine ethyl ester  
hydrochloride 698-27-1, 4-Methylsalicylaldehyde 1655-07-8, Ethyl  
2-cyclohexanonecarboxylate 2420-26-0 2426-02-0 5445-17-0, Methyl  
2-bromopropionate 127350-92-9, 2-Fluoro-4-nitrophenylhydrazine  
127684-18-8 158756-18-4

RL: RCT (Reactant); RACT (Reactant or reagent)

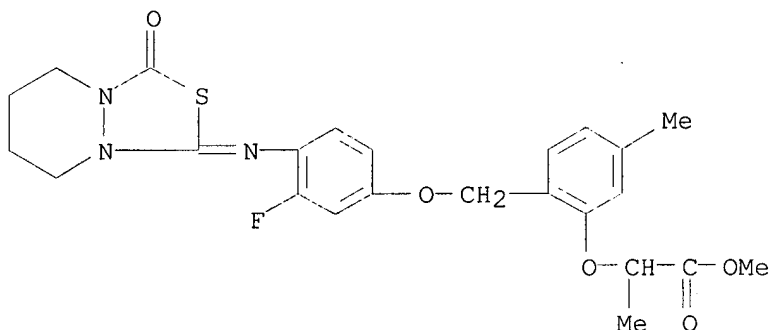
(reagent in prepn. of herbicidal heterocyclic  
phenoxymethylphenoxyalkanoates)

IT 28987-50-0  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(redn. of)

IT 154079-90-0P  
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prepn. as herbicide)

RN 154079-90-0 HCAPLUS

CN Propanoic acid, 2-[2-[[3-fluoro-4-[(tetrahydro-3-oxo-1H,3H-  
[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenoxy)methyl]-5-  
methylphenoxy]-, methyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:53895 HCAPLUS

DN 126:74873

TI Preparation of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or  
thio)trione as herbicidal agents

IN Crews, Alvin Donald, Jr.; Harrington, Philip Mark; Karp, Gary Mitchell;  
Manfredi, Mark Christopher; Guaciaro, Michael Anthony

PA American Cyanamid Company, USA

SO Eur. Pat. Appl., 155 pp.  
CODEN: EPXXDW

DT Patent

LA English

IC ICM C07D403-10  
ICS C07D513-04; C07D251-30; C07D251-34; C07D251-38; C07D207-44;  
C07D209-48; A01N043-64

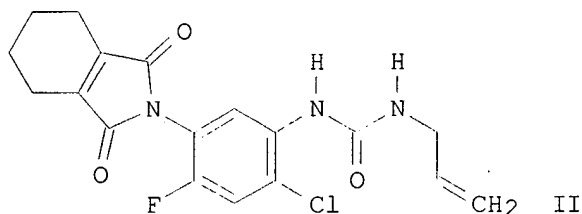
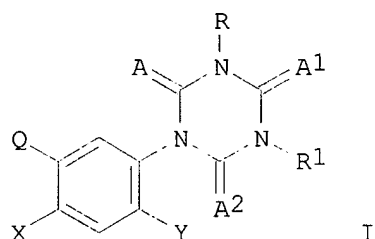
ICI C07D513-04, C07D279-00, C07D235-00; C07D513-04, C07D285-00, C07D237-00

CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 5

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 745599	A2	19961204	EP 1996-303836	19960529 <--
	EP 745599	A3	19970305		
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	US 5610120	A	19970311	US 1995-458639	19950602 <--
	US 5612481	A	19970318	US 1995-459567	19950602 <--
	US 5616706	A	19970401	US 1995-458211	19950602 <--
	US 5659031	A	19970819	US 1995-458324	19950602 <--
	JP 09025270	A2	19970128	JP 1996-156315	19960529 <--
	AU 9654603	A1	19961212	AU 1996-54603	19960530 <--
	AU 725805	B2	20001019		
	ZA 9604442	A	19971209	ZA 1996-4442	19960530 <--

	CA 2177876	AA	19961203	CA 1996-2177876	19960531 <--
	CN 1138580	A	19961225	CN 1996-105323	19960531 <--
	BR 9602563	A	19981006	BR 1996-2563	19960531 <--
PRAI	US 1995-458211	A	19950602		
	US 1995-458324	A	19950602		
	US 1995-458639	A	19950602		
	US 1995-458920	A	19950602		
	US 1995-459567	A	19950602		
	US 1995-459868	A	19950602		
	US 1995-459919	A	19950602		
	US 1995-459950	A	19950602		
OS	CASREACT 126:74873; MARPAT 126:74873				
GI					



AB The title compds. [I; X, Y = H, halo, NO<sub>2</sub>, etc.; R = H, C1-6 alkyl, C2-12 alkoxyalkyl, etc.; R<sub>1</sub> = H, C3-6 alkenyl, C3-6 alkynyl, etc.; Q = heterocyclyl; A, A<sub>1</sub>, A<sub>2</sub> = O, S], useful for the control of undesirable plant species, were prepd. Thus, cyclization of urea II with N-(chlorocarbonyl)isocyanate in PhMe afforded I [X = F; Y = Cl; R = H; R<sub>1</sub> = CH<sub>2</sub>CH=CH<sub>2</sub>; Q = 1-cyclohexene-1,2-dicarboximido; A = A<sub>1</sub> = A<sub>2</sub> = O] which showed 91-99% control of Galium Aparine and Chenopodium Album, L. in postemergence herbicidal evaluation at 0.500 kg/ha.

ST herbicide heterocyclylphenyltriazinetriene heterocyclylphenyltriazinetriene prepn; heterocyclization triazine formation; triazinetrione heterocyclylphenyl prepn herbicide; triazinetrithione heterocyclylphenyl prepn herbicide

IT Herbicides

Heterocyclization

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or thio)trione as herbicidal agents)

IT	185382-46-1P	185382-47-2P	185382-48-3P	185382-49-4P	185382-50-7P
	185382-51-8P	185382-52-9P	185382-53-0P	185382-54-1P	185382-55-2P
	185382-56-3P	185382-57-4P	185382-58-5P	185382-59-6P	
	<b>185382-60-9P</b>	185382-61-0P	185382-62-1P	185382-63-2P	
	185382-64-3P				

RL: AGR (Agricultural use); BAC (Biological activity or

effector, except adverse); BSU (Biological study, unclassified); SPN

(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES



(Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or thio)trione as herbicidal agents)

IT 67-63-0, 2-Propanol, reactions 75-30-9, 2-Iodopropane 106-96-7, Propargyl bromide 110-52-1, 1,4-Dibromobutane 367-25-9 623-33-6, Glycine ethyl ester hydrochloride 652-39-1, 3-Fluorophthalic anhydride 1476-23-9, Allyl isocyanate 2426-02-0 2447-79-2, 2,4-Dichlorobenzamide 2450-71-7, Propargylamine 3674-13-3, Ethyl 2,3-Dibromopropionate 4114-28-7, 1,2-Dicarbethoxyhydrazine 5292-43-3, tert-Butyl bromoacetate 29921-57-1, Isopropyl bromoacetate 57946-56-2, 4-Chloro-2-fluoroaniline 65303-82-4, 4-Fluoro-3-nitrophenyl isocyanate 88578-90-9, 2-Chloro-4-fluorobenzamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or thio)trione as herbicidal agents)

IT 5310-94-1P 39718-27-9P 52944-50-0P 58729-31-0P 59280-70-5P  
59280-72-7P 86987-15-7P 86988-03-6P 89990-53-4P 95635-45-3P  
95635-47-5P 185382-65-4P 185382-66-5P 185382-67-6P 185382-68-7P  
185382-69-8P 185382-70-1P 185382-71-2P 185382-72-3P 185382-73-4P  
185382-74-5P 185382-75-6P 185382-76-7P 185382-77-8P 185382-78-9P  
185382-79-0P 185382-80-3P 185382-81-4P 185382-82-5P 185382-83-6P  
185382-84-7P 185382-85-8P 185382-86-9P 185382-87-0P 185382-88-1P  
185382-89-2P 185382-90-5P 185382-91-6P 185382-92-7P 185382-94-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or thio)trione as herbicidal agents)

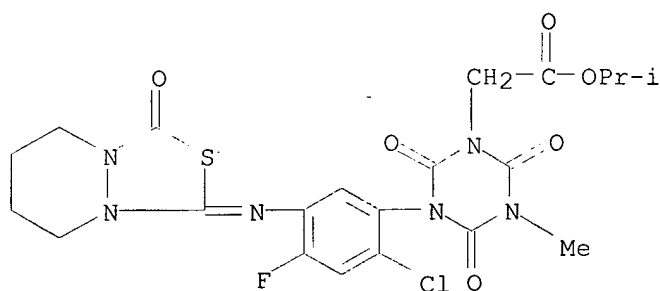
IT 185382-60-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-(3-heterocyclylphenyl)-s-triazine-2,4,6-oxo(or thio)trione as herbicidal agents)

RN 185382-60-9 HCAPLUS

CN 1,3,5-Triazine-1(2H)-acetic acid, 3-[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]tetrahydro-5-methyl-2,4,6-trioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:298068 HCAPLUS

DN 124:343312

TI Preparation of 5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones as herbicides

IN Ota, Chikako; Natsume, Bunji

PA Mitsubishi Chemical Corporation, Japan

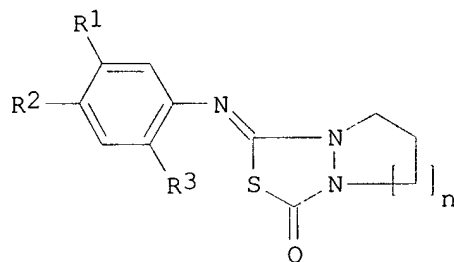
SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent  
 LA English  
 IC ICM C07D285-12  
 ICS C07D513-04; C07C337-06; A01N043-90  
 ICI C07D513-04, C07D285-00, C07D231-00; C07D513-04, C07D285-00, C07D237-00  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 698604	A1	19960228	EP 1995-112944	19950817 <--
	R: DE, FR, GB				
	JP 08059642	A2	19960305	JP 1994-196873	19940822 <--
	US 5705651	A	19980106	US 1995-517676	19950822 <--
PRAI	JP 1994-196873		19940822		
OS	MARPAT 124:343312				
GI					



AB Title compds. (I; R1 = H, inert substituent; R2 = halo, NO2, Me, OMe; R3 = H or halo; n = 1-3) were prep'd. as herbicides (no data). Thus, 5-(methoxycarbonylmethylthio)-4-chloro-2-fluorophenyl isothiocyanate was condensed with H2NNHCHO and the cyclized product converted in 2 steps to I (R1 = SCH2CO2Me, R2 = Cl, R3 = F, n = 1).

ST azathiabicycloalkane phenylimino prep'n herbicide

IT Herbicides

(5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones)

IT 117337-19-6P 146605-54-1P **153053-77-1P 176506-47-1P**

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones as herbicides)

IT 109-64-8, 1,3-Dibromopropane 110-52-1, 1,4-Dibromobutane 131533-23-8 176506-48-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones as herbicides)

IT 176506-41-5P 176506-42-6P 176506-43-7P 176506-44-8P 176506-45-9P 176506-46-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones as herbicides)

IT **153053-77-1P**

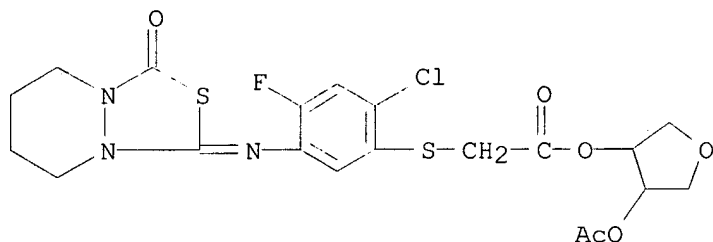
RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 5-phenylimino-1,5-diaza-3-thiabicycloalkane-2-ones as

herbicides)

RN 153053-77-1 HCAPLUS

CN Acetic acid, [[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]thio]-, 4-(acetyloxy)tetrahydro-3-furanyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:147746 HCAPLUS

DN 124:202239

TI Preparation of iminothiazolidinone derivatives as herbicides

IN Takano, Minoru; Enomoto, Masayuki; Saito, Kazuo; Kizawa, Satoru

PA Sumitomo Chemical Co, Japan

SO Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07D277-54

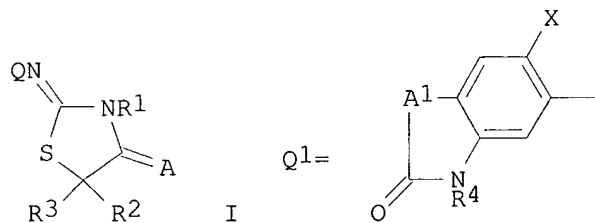
ICS A01N043-78; A01N043-84; C07D417-12

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))

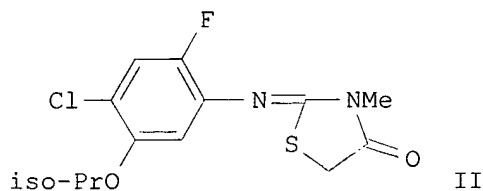
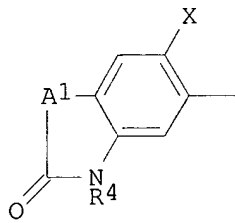
Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07304759	A2	19951121	JP 1994-99783	19940513 <--
PRAI	JP 1994-99783		19940513		
OS	MARPAT 124:202239				
GI					



Q1=



AB The title compds. I [R1 - R3 = (halo)alkyl, etc.; A = O, etc.; Q = Q1, etc.; A1 = O, etc.; R4 = (halo)alkyl, (halo)alkenyl, etc.; X = H, Cl,

etc.] are claimed. The title compd. II (prepn. given) at 500 g/ha gave excellent control of Abutilon avicennae.

ST iminothiazolone prepn herbicide

IT Herbicides

(prepn. of iminothiazolidinone derivs. as herbicides)

IT 155560-61-5P 174212-18-1P 174212-19-2P 174212-20-5P 174212-21-6P  
 174212-22-7P 174212-23-8P 174212-24-9P 174212-25-0P 174212-26-1P  
 174212-27-2P 174212-28-3P 174212-29-4P 174212-30-7P 174212-31-8P  
 174212-32-9P 174212-33-0P 174212-34-1P 174212-35-2P 174212-36-3P  
 174212-37-4P 174212-38-5P 174212-39-6P 174212-40-9P 174212-41-0P  
 174212-42-1P **174212-43-2P** 174212-44-3P 174212-45-4P  
**174212-46-5P** 174212-47-6P 174212-48-7P 174212-49-8P  
 174212-50-1P 174212-51-2P 174212-52-3P 174212-53-4P 174212-54-5P  
 174212-55-6P 174212-56-7P 174212-57-8P 174212-58-9P 174212-59-0P  
 174212-60-3P 174212-61-4P 174212-62-5P 174212-63-6P 174212-64-7P  
 174212-65-8P 174212-66-9P 174212-67-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of iminothiazolidinone derivs. as herbicides)

IT 78-88-6, 2,3-Dichloropropene 79-08-3, Bromoacetic acid 79-11-8,  
 Chloroacetic acid, reactions 96-34-4, Methyl chloroacetate 106-96-7,  
 Propargyl bromide 107-14-2, Chloroacetonitrile 107-30-2, Chloromethyl  
 methyl ether 535-11-5, Ethyl .alpha.-bromopropionate 2740-97-8  
 3518-65-8, Chloromethylsulfonyl chloride 174212-70-5 174212-71-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of iminothiazolidinone derivs. as herbicides)

IT 174212-68-1P 174212-69-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of iminothiazolidinone derivs. as herbicides)

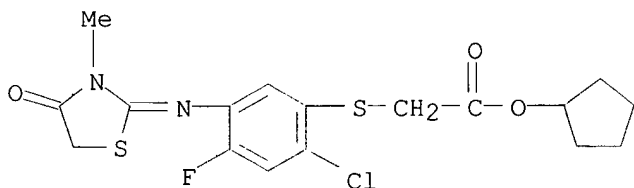
IT **174212-43-2P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of iminothiazolidinone derivs. as herbicides)

RN 174212-43-2 HCAPLUS

CN Acetic acid, [[2-chloro-4-fluoro-5-[(3-methyl-4-oxo-2-thiazolidinylidene)amino]phenyl]thio]-, cyclopentyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:921908 HCAPLUS

DN 123:340145

TI Preparation 2-phenyltriazolinone herbicides

IN Linker, Karl-Heinz; Findeisen, Kurt; Haas, Wilhelm; Schallner, Otto;  
 Wroblowsky, Heinz-Juergen; Dollinger, Markus; Santel, Hans-Joachim

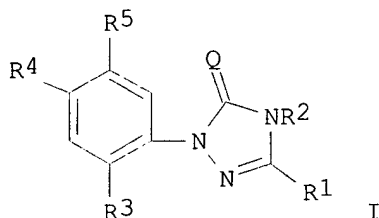
PA Bayer A.-G., Germany

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

DT Patent  
 LA German  
 IC ICM C07D249-12  
 ICS C07D409-14; C07D405-12; C07D401-12; C07D409-12; A01N043-653;  
 A01N047-06; A01N047-30; A01N057-18; A01N047-20; C07F009-40;  
 C07F009-6518  
 ICA C07D521-00  
 ICI C07D249-12, C07D333-38, C07D307-04, C07D309-12, C07D307-34, C07D213-04  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4405614	A1	19950824	DE 1994-4405614	19940222 <--
	WO 9522532	A1	19950824	WO 1995-EP466	19950209 <--
	W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, NO, NZ, PL, RO, RU, SK, UA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2183641	AA	19950824	CA 1995-2183641	19950209 <--
	AU 9518084	A1	19950904	AU 1995-18084	19950209 <--
	EP 746550	A1	19961211	EP 1995-909695	19950209 <--
	R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL				
	CN 1150421	A	19970521	CN 1995-191743	19950209 <--
	BR 9506928	A	19970909	BR 1995-6928	19950209 <--
	JP 09509923	T2	19971007	JP 1995-521556	19950209 <--
PRAI	DE 1994-4405614		19940222		
	WO 1995-EP466		19950209		
OS,	MARPAT 123:340145				
GI					

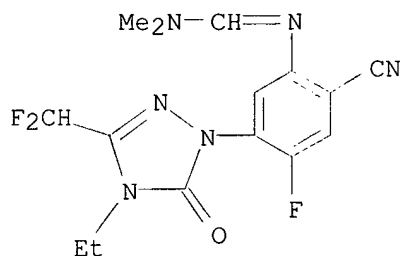


AB The title compds. [I; Q = O, S; R1 = haloalkyl; R2 = H, NH2, CN, alkyl, alkenyl, alkynyl, haloalkenyl, (un)substituted cycloalkyl etc.; R3 = H, halogen; R4 = CN, NO2; R5 = isocyano, thiocyanato, sulfo, halosulfonyl, alkylaminooxy, etc.], useful as herbicides for controlling unwanted plants, are prepd. Thus, 2-(2-fluoro-4-cyano-5-aminophenyl)-4-ethyl-5-trifluoromethyl-2,4-dihydro-3H-1,2,4-triazol-3-one was amidated with Me3CCOCl, producing 2-[2-fluoro-4-cyano-5-(tert-butylcarbonylamino)phenyl]-4-ethyl-5-trifluoromethyl-2,4-dihydro-3H-1,2,4-triazol-3-one, m.p. 149.degree..

ST phenyltriazolinone prepn herbicide; triazolinone phenyl  
 IT Herbicides  
 (2-phenyltriazolinones)

IT	157278-92-7P	170366-26-4P	170366-27-5P	170366-28-6P	170366-29-7P
	170366-30-0P	170366-31-1P	170366-32-2P	170366-33-3P	170366-34-4P
	170366-35-5P	170366-36-6P	170366-37-7P	170366-38-8P	170366-39-9P
	170366-40-2P	170366-41-3P	170366-42-4P	170366-43-5P	170366-44-6P
	170366-45-7P	170366-46-8P	170366-47-9P	170366-48-0P	170366-49-1P
	170366-50-4P	170366-51-5P	170366-52-6P	170366-53-7P	

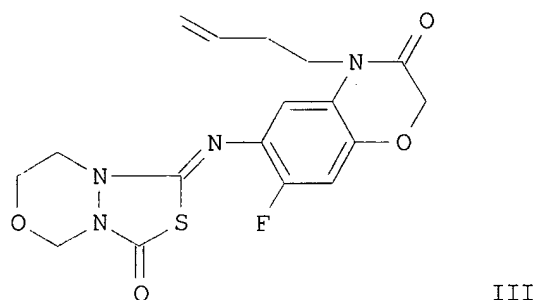
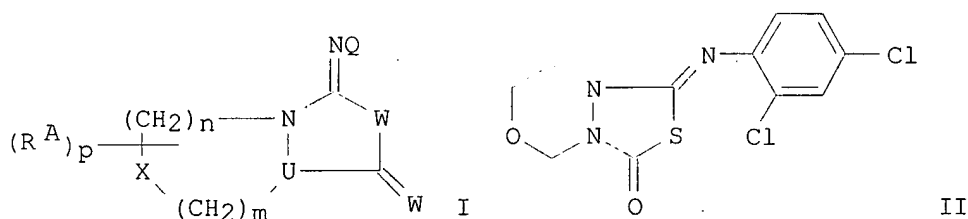
170366-54-8P 170366-55-9P 170366-56-0P 170366-57-1P 170366-58-2P  
 170366-59-3P 170366-60-6P 170366-61-7P 170366-62-8P 170366-63-9P  
 RL: **AGR (Agricultural use)**; SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. 2-phenyltriazolinone herbicides)  
 IT 122-51-0, Triethyl orthoformate 541-41-3, Ethyl chloroformate  
 3282-30-2, Pivaloyl chloride 51856-10-1 74038-47-4 146780-26-9,  
 5-Chloro-2,4-difluorobenzonitrile 157277-54-8 157277-58-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. 2-phenyltriazolinone herbicides from)  
 IT 157277-33-3P 157278-38-1P 157279-12-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. 2-phenyltriazolinone herbicides from)  
 IT **170366-51-5P**  
 RL: **AGR (Agricultural use)**; SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. 2-phenyltriazolinone herbicides)  
 RN 170366-51-5 HCAPLUS  
 CN Methanimidamide, N'-[2-cyano-5-[3-(difluoromethyl)-4-ethyl-4,5-dihydro-5-  
 oxo-1H-1,2,4-triazol-1-yl]-4-fluorophenyl]-N,N-dimethyl- (9CI) (CA INDEX  
 NAME)



L97 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1995:863363 HCAPLUS  
 DN 123:256725  
 TI Preparation of oxa- and thia(di)azabicyclic compounds as herbicides  
 IN Hong, Wonpyo; Schafer, Matthias; Stevenson, Thomas Martin  
 PA du Pont de Nemours, E. I., and Co., USA; Degussa A.-G.  
 SO PCT Int. Appl., 87 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D273-04  
 ICS C07D513-04; C07C281-06; C07C337-06; A01N043-90  
 ICI C07D513-04, C07D285-00, C07D273-00; C07D513-04, C07D277-00, C07D209-00  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9506643	A1	19950309	WO 1994-US9522	19940830 <--
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9476366	A1	19950322	AU 1994-76366	19940830 <--
EP 716655	A1	19960619	EP 1994-926568	19940830 <--
R: DE, ES, FR, IT				

	BR 9407573	A	19960716	BR 1994-7573	19940830	<--
	US 5712225	A	19980127	US 1996-605010	19960228	<--
PRAI	US 1993-116787		19930903			
	WO 1994-US9522		19940830			
OS	CASREACT 123:256725; MARPAT 123:256725					
GI						



AB Title compds. I (X = O, S, SO, SO<sub>2</sub>, CH<sub>2</sub>, CHF, CHCl, CHBr, etc.; m, n = 1, 2, where m+n = 2, 3; p = 0-9; U = N, CH; W = O, S; RA halo, (halo)C1-4 alkyl, NC, C3-4 alkenyl, C1-3 alkylthio, etc., or 2RA on the same C, together with the C = CO; Q = substituted Ph, substituted heterocyclyl) are prepd. N-(2,4-dichlorophenyl)tetrahydro-4H-1,3,4-oxadiazine-4-carbothioamide in MePh and Et<sub>3</sub>N was added to thiophosgene in MePh to give II. A similar prepd. compd. III tested at 50 g/ha completely controlled post- and preemergence chickweed.

ST thiadiazolooxadiazinone prepn herbicide; pyrrolothiazolone prepn  
herbicide; herbicide pyrrolothiazolone thiadiazolooxadiazinone prepn  
IT Herbicides

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      (prepn. of oxa- and thia(di)azabicyclic compds. as herbicides)

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IT	169156-03-0P	169156-04-1P	169156-05-2P	169156-06-3P	169156-07-4P
	169156-08-5P	169156-09-6P	169156-10-9P	169156-11-0P	169156-12-1P
	169156-13-2P	<b>169156-14-3P</b>	169156-15-4P	169156-16-5P	
	<b>169156-17-6P</b>	169156-18-7P	169156-19-8P	169156-20-1P	

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

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007
      (prepn. of oxa- and thia(di)azabicyclic compds. as herbicides)

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IT 109-84-2, (2-Hydroxyethyl)hydrazine 6590-96-1, 2,4-Dichlorophenyl  
isothiocyanate 7553-49-3, Proline, 4-fluoro- 86798-29-0,  
4-Chloro-2-fluoro-5-isopropoxyphenyl isothiocyanate

RL: RCT (Reactant); RACT (Reactant or reagent)

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    (prepn. of oxa- and thia(di)azabicyclic compds. as herbicides)

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IT 98041-63-5P 169156-22-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

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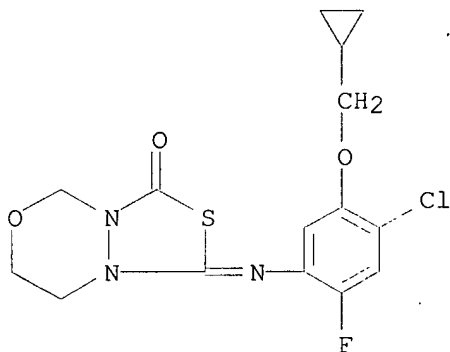
IT 169156-14-3P

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxa- and thia(di)azabicyclic compds. as herbicides)

RN 169156-14-3 HCAPLUS

CN 1H,3H,5H-[1,3,4]Thiadiazolo[3,4-c][1,3,4]oxadiazin-3-one,  
1-[[4-chloro-5-(cyclopropylmethoxy)-2-fluorophenyl]imino]dihydro- (9CI)  
(CA INDEX NAME)



L97 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:487975 HCAPLUS

DN 122:239725

TI Herbicidal 1H,3H,5H-[1,3,4]thiadiazolo[3,4-a][1,2]diazepin-1-ones and analogs

IN Pissiotas, Georg; Moser, Hans; Brunner, Hans-Georg

PA Ciba-Geigy A.-G., Switz.

SO PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D513-04

ICS C07D243-02; C07C031-38; A01N043-90

ICI C07D513-04, C07D285-00, C07D243-00

CC 28-20 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5

FAN.CNT 1

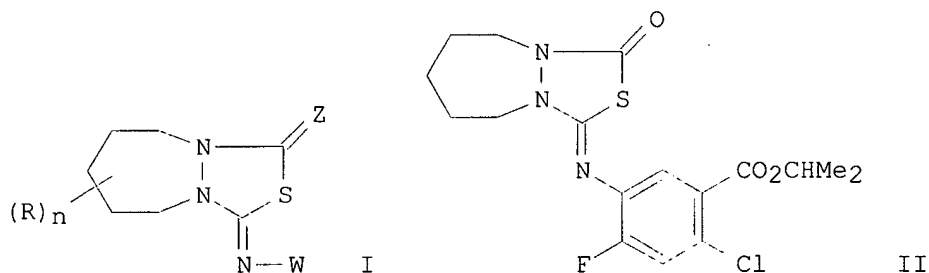
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9500521	A1	19950105	WO 1994-EP1893	19940610 <--
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2165196	AA	19950105	CA 1994-2165196	19940610 <--
AU 9470002	A1	19950117	AU 1994-70002	19940610 <--
BR 9406971	A	19960326	BR 1994-6971	19940610 <--
EP 705267	A1	19960410	EP 1994-918863	19940610 <--
EP 705267	B1	19970813		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09500373	T2	19970114	JP 1994-502388	19940610 <--
ES 2107233	T3	19971116	ES 1994-918863	19940610 <--
US 5817602	A	19981006	US 1995-569071	19951221 <--
PRAI CH 1993-1888		19930623		



WO 1994-EP1893  
MARPAT 122:239725

19940610

OS  
GI



AB The tetrahydro-1H,3H,5H-[1,3,4]thiadiazolo[3,4-a][1,2]diazepin-1-ones and 1H,3H,5H-[1,3,4]thiadiazolo[3,4-a][1,2]diazepin-1-thiones I (R = alkyl, cycloalkyl, haloalkyl, etc.; n = integer; Z = oxygen, sulfur; W = aryl, heteroacyl substituent) were disclosed as herbicides. A specifically claimed compd. is iso-Pr 2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H,5H-[1,3,4]thiadiazolo[3,4-a][1,2]diazepin-1-ylidene)amino]benzoate (II).

ST herbicide thiadiazolodiazepinyldeneamino benzoate prepn;  
thiadiazolodiazepinone prepn herbicide

IT Herbicides

(prepn. of thiadiazolodiazepinones as herbicides)

IT 151540-51-1P 151540-83-9P 162220-05-5P 162220-11-3P 162220-12-4P  
162220-13-5P 162220-14-6P 162220-15-7P **162220-16-8P**  
162220-17-9P 162220-18-0P 162220-19-1P 162220-20-4P 162220-21-5P  
162220-22-6P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(prepn. of thiadiazolodiazepinones as herbicides)

IT 138852-02-5 162220-09-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of thiadiazolodiazepinones as herbicides)

IT 162220-04-4P 162220-06-6P 162220-07-7P 162220-08-8P 162220-10-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. of thiadiazolodiazepinones as herbicides)

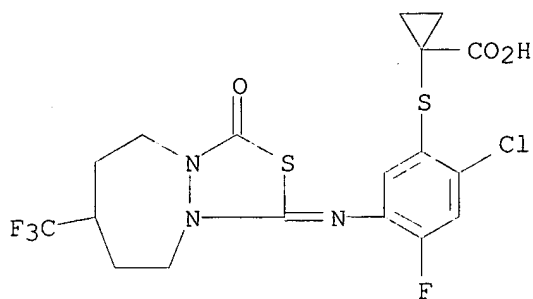
IT **162220-16-8P**

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(prepn. of thiadiazolodiazepinones as herbicides)

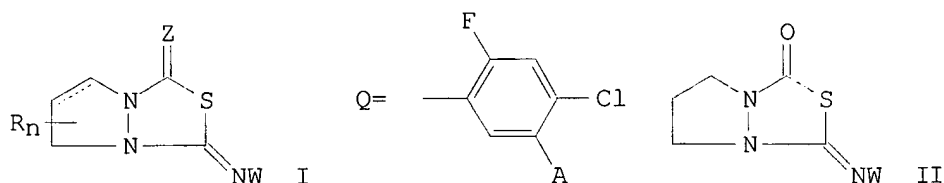
RN 162220-16-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 1-[[2-chloro-4-fluoro-5-[[tetrahydro-3-oxo-7-(trifluoromethyl)-1H,3H,5H-[1,3,4]thiadiazolo[3,4-a][1,2]diazepin-1-ylidene]amino]phenyl]thio]- (9CI) (CA INDEX NAME)



L97 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1993:191744 HCAPLUS  
 DN 118:191744  
 TI Preparation of 8-arylimino-7-thia-1,5-diazabicyclo[3.3.0]octan-6-ones as herbicides  
 IN Brunner, Hans Georg; Moser, Hans; Pissiotas, Georg  
 PA Ciba-Geigy A.-G., Switz.  
 SO PCT Int. Appl., 132 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D513-04  
 ICS A01N043-90  
 ICI C07D513-04, C07D285-00, C07D231-00  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9221684	A1	19921210	WO 1992-EP1092	19920518	<--
	W: AU, BG, BR, CA, CS, FI, HU, JP, KR, NO, PL, RO, RU, US					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE					
	AU 9217509	A1	19930108	AU 1992-17509	19920518	<--
	BR 9206101	A	19940802	BR 1992-6101	19920518	<--
	JP 06507607	T2	19940901	JP 1992-509205	19920518	<--
	EP 639196	A1	19950222	EP 1992-910124	19920518	<--
	R: AT, CH, DE, ES, FR, GB, IT, LI, SE					
	ZA 9204100	A	19931206	ZA 1992-4100	19920605	<--
	US 5494889	A	19960227	US 1993-157052	19931202	<--
PRAI	CH 1991-1682		19910606			
	CH 1992-642		19920302			
	WO 1992-EP1092		19920518			
OS	MARPAT 118:191744					
GI						



AB Title compds. [I; R = (cyclo)alkyl, alkenyl, Ph, etc.; W = (hetero)aryl ;  
 Z = O, S; n = 0-4] were prepd. Thus, H2NNHCO2CMe3 was treated with

(Me3CCO)2O and the product cyclocondensed with Br(CH2)3Br to give, after deprotection, pyrazolidine dihydrobromide which was condensed with WSCN (W = Ph group Q, A = SCH2CO2Me) to give, after cyclocondensation with COCl2, title compd. II (W = Q, A = SCH2CO2Me). II (W = Q, A = CO2Me) gave complete control of Avena, Sinapis, Setaria, and Stellaria species at 4 kg/ha preemergent.

ST thiadiazabicyclooctanone arylimino prepn herbicide

IT Herbicides

((arylimino)thiadiazabicyclooctanones)

IT 14666-61-8P 146595-10-0P 146605-64-3P 146605-65-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of herbicides)

IT 146605-48-3P 146605-49-4P 146605-50-7P 146605-51-8P 146605-52-9P

146605-53-0P 146605-54-1P **146605-55-2P 146605-56-3P**

146605-57-4P 146605-58-5P 146605-59-6P 146605-60-9P 146605-61-0P

146605-62-1P 146605-63-2P

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

IT 109-64-8, 1,3-Dibromopropane 870-46-2 131533-23-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of herbicides)

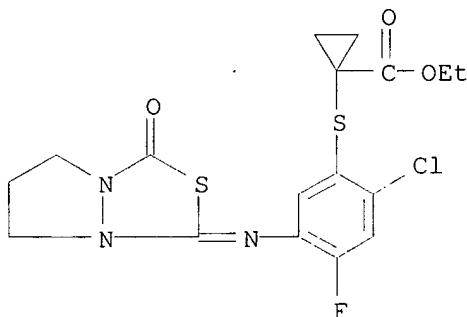
IT **146605-55-2P**

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

RN 146605-55-2 HCAPLUS

CN Cyclopropanecarboxylic acid, 1-[[2-chloro-5-[(dihydro-3-oxo-1H,3H,5H-pyrazolo[1,2-c][1,3,4]thiadiazol-1-ylidene)amino]-4-fluorophenyl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



L97 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1992:214522 HCAPLUS

DN 116:214522

TI Preparation of (heterocyclylphenylthio)cycloalkanecarboxylic acid derivatives as herbicides and plant growth regulators

IN Pissiotas, Georg; Moser, Hans; Brunner, Hans Georg; Steiner, Eginhard

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 223 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C07D209-48  
 ICS A01N043-00; C07D471-04; C07D487-04; C07D207-408; C07D211-82;  
 C07D513-04; C07D265-26  
 ICI C07D471-04, C07D235-00, C07D221-00; C07D487-04, C07D249-00, C07D237-00;  
 C07D513-04, C07D285-00, C07D237-00  
 CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 468924	A2	19920129	EP 1991-810577	19910716 <--
	EP 468924	A3	19920429		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2047489	AA	19920124	CA 1991-2047489	19910719 <--
	US 5180418	A	19930119	US 1991-732988	19910719 <--
	AU 9181261	A1	19920130	AU 1991-81261	19910722 <--
	AU 638854	B2	19930708		
	ZA 9105720	A	19920325	ZA 1991-5720	19910722 <--
	BR 9103125	A	19920428	BR 1991-3125	19910722 <--
	JP 04234360	A2	19920824	JP 1991-206542	19910723 <--
PRAI	CH 1990-2439		19900723		
OS	MARPAT 116:214522				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. [I; W = Q1-Q3, etc.; A = COR3, cyano; R1 = H, F; R2 = halo, cyano; R3 = Cl, amino, XR5, pyrrolidino, morpholino, etc.; R4, R14 = H, F, Cl, Br, alkyl, CF3; R5 = H, (cyclo)alkyl, alkoxyalkyl, haloalkyl, alkylthioalkyl, cyanoalkyl, alkenyl, (substituted) PhCH2, etc.; X, Z = O, S; n = 0-4], were prepd. Thus, Me 1-(5-amino-2-chloro-4-fluorophenylthio)cyclobutanecarboxylate (prepn. given) and 3,4,5,6-tetrahydrophthalic anhydride were refluxed 5 h in AcOH to give title compd. II. II at 250 g/ha postemergent gave 100% control of Abutilon, Sida spinosa, etc.

ST heterocyclylphenylthiocycloalkanecarboxylate prepn herbicide; plant growth regulator heterocyclylphenylthiocycloalkanecarboxylate

IT Herbicides

((heterocyclylphenylthio)cycloalkanecarboxylic acid derivs.)

IT Plant hormones and regulators

RL: RCT (Reactant); RACT (Reactant or reagent)

((heterocyclylphenylthio)cycloalkanecarboxylic acid derivs.)

IT 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 4759-65-3,  
 3-Trifluoromethylglutaric anhydride

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with (cyclobutylthio)aniline deriv., in prepn. of herbicide and plant growth regulator)

IT 505-19-1, Hexahydropyridazine

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with (isothiocyanatophenylthio)cyclobutane deriv., in prepn. of herbicide and plant growth regulator)

IT 29547-04-4, Methyl 2,4-dibromobutyrate

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with aminochlorofluorothiophenol, in prepn. of herbicide and plant growth regulator)

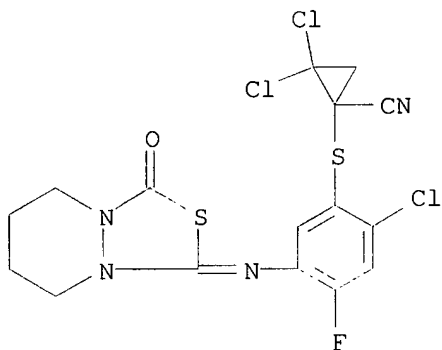
IT 463-71-8, Thiophosgene

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with aniline deriv., in prepn. of herbicide and plant growth regulator)

IT 99719-10-5

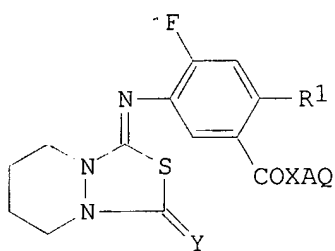
- RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with bromocyclobutanecarboxylate, in prepn. of herbicide and and plant growth regulator)
- IT 51175-79-2, Methyl 1-bromocyclobutanecarboxylate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with phenylmercaptan deriv., in prepn. of herbicide and plant growth regulator)
- IT 140909-42-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of, in prepn. of, as intermediate for herbicide and plant growth regulator)
- IT 75-44-5, Phosgene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with (hexahydropyridazinylthiocarbonylamino)phenylthiocyclobutane deriv.)
- IT **140909-27-9P 140909-28-0P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as herbicide and in plant growth regulator)
- IT **140909-04-2P 140909-05-3P 140909-06-4P 140909-07-5P**  
**140909-08-6P 140909-09-7P 140909-10-0P 140909-11-1P**  
**140909-12-2P 140909-13-3P 140909-14-4P 140909-15-5P**  
**140909-16-6P 140909-17-7P 140909-18-8P**  
**140909-19-9P 140909-20-2P 140909-21-3P**  
**140909-22-4P 140909-23-5P 140909-24-6P**  
**140909-25-7P 140909-26-8P 140909-29-1P**  
**140909-30-4P 140909-31-5P 140909-32-6P 140909-33-7P 140909-34-8P**  
**140909-35-9P 140909-36-0P 140909-37-1P 140909-38-2P 140909-39-3P**  
**140936-19-2P 140936-20-5P 140936-21-6P 140936-22-7P**  
**140936-23-8P**  
RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as herbicide and plant growth regulator)
- IT 140909-40-6P 140909-41-7P 140909-43-9P 140909-44-0P 140936-24-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for herbicide and plant growth regulator)
- IT **140909-27-9P**  
RL: **AGR (Agricultural use)**; PREP (Preparation)  
(prepn. of, as herbicide and in plant growth regulator)
- RN 140909-27-9 HCAPLUS
- CN Cyclopropanecarbonitrile, 2,2-dichloro-1-[[2-chloro-4-fluoro-5-[(5,6,7,8-tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]thio]- (9CI) (CA INDEX NAME)



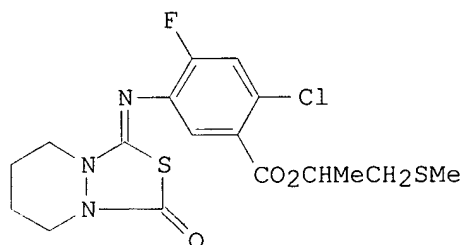
AN 1992:83680 HCAPLUS  
 DN 116:83680  
 TI Preparation of (phenylimino)thiadiazabicyclononanone derivatives as herbicides and plant growth regulators  
 IN Pissiotas, Georg; Moser, Hans; Brunner, Hans Georg  
 PA Ciba-Geigy A.-G., Switz.  
 SO Eur. Pat. Appl., 48 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 IC ICM C07D513-04  
 ICS C07D237-04; C07C331-28; A01N043-90  
 ICI C07D513-04, C07D285-00, C07D237-00  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 457714	A1	19911121	EP 1991-810168	19910313 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 5135562	A	19920804	US 1991-672204	19910319 <--
	CA 2038731	AA	19910923	CA 1991-2038731	19910320 <--
	JP 06056847	A2	19940301	JP 1991-82034	19910320 <--
	BR 9101114	A	19911105	BR 1991-1114	19910321 <--
	ZA 9102100	A	19911224	ZA 1991-2100	19910321 <--
	US 5229514	A	19930720	US 1992-881571	19920512 <--
PRAI	CH 1990-949	.	19900322		
	CH 1990-951		19900322		
	US 1991-672204		19910319		
OS	MARPAT 116:83680				
GI					



I

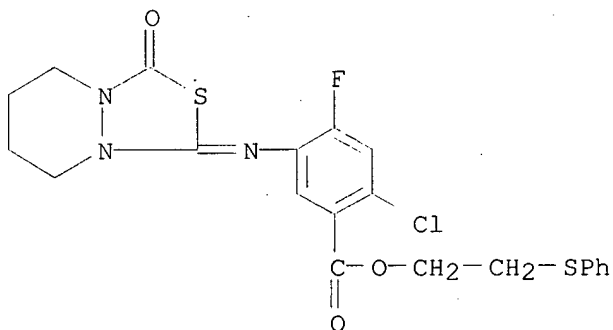


II

AB Title compds. I [R1 = halo; X = O, S; Y = O, S; A = C1-4 alkylene; Q = OH, halo, cyano, (substituted) C2-6 alkenyl, C2-4 alkynyl, C1-6 alkylcarbonyl, C2-6 alkoxyalkylcarbonyl, PhCO, S(O)kR2, etc.; R2 = C1-10 alkyl; k = 0-2] were prepd. Thus 2-chloro-4-fluoro-5-nitrobenzoyl chloride was treated with MeCHOHCH2SMe in the presence of Et3N and the resultant ester was reduced by Raney Ni to the amino deriv. This was converted to the

isothiocyanate by ClCSCl. Condensation of the isothiocyanate by hexahydropyridazine, followed by cyclocondensation with ClCOCl gave title compd. II. II at 125 g/ha post-emergent gave complete control of a no. of weeds, including Solanum nigrum.

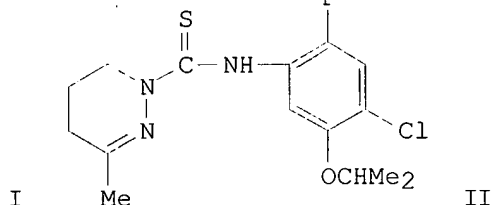
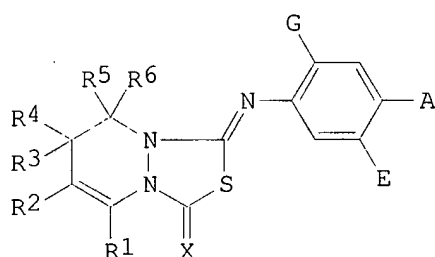
- ST phenyliminothiadiazabicyclononanone prepn herbicide; plant growth regulator phenyliminothiadiazabicyclononanone
- IT Herbicides  
((phenylimino)thiadiazabicyclononanone derivs.)
- IT Plant hormones and regulators  
RL: RCT (Reactant); RACT (Reactant or reagent)  
((phenylimino)thiadiazabicyclononanone derivs.)
- IT 138867-64-8P 138867-65-9P 138867-66-0P 138867-67-1P 138867-68-2P  
138867-69-3P 138867-70-6P 138867-71-7P  
138867-72-8P 138867-73-9P 138867-74-0P  
138867-75-1P 138867-76-2P 138867-77-3P 138867-78-4P  
138867-79-5P 138867-80-8P 138867-81-9P 138867-82-0P  
138867-83-1P 138867-84-2P 138867-85-3P 138867-86-4P  
138867-87-5P 138867-88-6P 138867-89-7P 138867-90-0P 138867-91-1P  
138867-92-2P 138867-93-3P 138867-94-4P 138885-28-6P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as herbicide and plant growth regulator)
- IT 138867-95-5P 138867-96-6P 138867-97-7P 138867-98-8P 138867-99-9P  
138868-00-5P 138868-01-6P 138868-02-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for herbicides and plant growth regulators)
- IT 75-44-5, Phosgene 137-00-8 463-71-8, Thiophosgene 505-19-1,  
Hexahydropyridazine 2365-48-2, Methyl thioglycolate 6943-87-9  
120890-66-6 138868-03-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in prepn. of herbicides and plant growth regulators)
- IT 138867-69-3P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as herbicide and plant growth regulator)
- RN 138867-69-3 HCAPLUS
- CN Benzoic acid, 2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]-, 2-(phenylthio)ethyl ester (9CI) (CA INDEX NAME)



TI Preparation of condensed heterocycles as herbicides  
 IN Sato, Jun; Fukuda, Kenzo; Ito, Kaoru; Suzuki, Koichi; Nawamaki, Tsutomu;  
 Watanabe, Shigeomi  
 PA Nissan Chemical Industries, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 75 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07D513-04  
 ICS A01N043-90; C07D237-04  
 ICA C07D263-32; C07D271-10; C07D403-12; C07D413-12; C07D417-12; C07F009-6561  
 CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02188588	A2	19900724	JP 1989-6552	19890114 <--
	JP 2762505	B2	19980604		
PRAI	JP 1989-6552		19890114		
OS	MARPAT 114:23974				
GI					



AB Condensed pyridazine derivs. (I; R1-R6 = H, halo, C1-4 alkyl, Ph, PhCH2; X = O, S; A = halo, NO2; E = H, halo, NH2, OH, SH, alkoxy, etc.; G = H, halo) are prepd. ClCO2CCl3 (0.18 mL) was added to a soln. of 0.84 g pyridazine deriv. II and 0.46 g pyridine in CH2Cl2 at 0.degree. to give 0.61 g I (R1 = Me, R2-R6 = H, X = O, A = Cl, G = F, E = Me2CHO). Also prepd. were 60 addnl. I which showed .gtoreq.90% control of barnyard grass, crabgrass, etc. at 0.02-0.12 kg/ha.

ST thiadiazolopyridine prepn herbicide

IT Herbicides

(thiadiazolopyridazine derivs.)

IT 503-38-8, Trichloromethyl chloroformate

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with pyridazinethioamide derivs.)

IT 463-71-8, Thiophosgene 32315-10-9, Triphosgene

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with pyridazinethiocarboxamide derivs.)

IT 131191-07-6 131191-08-7 131191-09-8 131191-10-1 131191-11-2

131191-14-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with trichloromethyl chloroformate)

IT 131206-05-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with triphosgene)

IT 131191-13-4 131191-14-5 131191-15-6 131191-16-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with thiophosgene)

IT 131191-12-3

RL: RCT (Reactant); RACT (Reactant or reagent)



(hydrolysis of)

IT 16596-41-1P, 1-Pyrrolidinamine 123614-66-4P 123614-67-5P  
 123614-68-6P 123614-69-7P 123614-71-1P 123614-72-2P 123614-73-3P  
 123614-74-4P 123614-75-5P 123614-76-6P 123614-77-7P 123614-78-8P  
 131191-15-6P 131191-54-3P 131191-60-1P 131191-61-2P 131191-62-3P  
 131191-63-4P 131191-64-5P 131191-65-6P 131206-08-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. and reaction of, in prepn. of herbicides)

IT 131191-07-6P 131191-12-3P 131191-17-8P 131191-18-9P  
 131191-19-0P 131191-20-3P 131191-21-4P 131191-22-5P  
 131191-23-6P 131191-24-7P 131191-25-8P 131191-26-9P  
 131191-27-0P 131191-28-1P 131191-29-2P  
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 131191-33-8P 131191-34-9P 131191-35-0P 131191-36-1P  
 131191-37-2P 131191-38-3P 131191-39-4P  
 131191-40-7P 131191-41-8P 131191-42-9P  
 131191-43-0P 131191-44-1P 131191-45-2P  
 131191-46-3P 131191-47-4P 131191-48-5P 131191-49-6P  
 131191-50-9P 131191-51-0P 131191-52-1P  
 131191-53-2P 131191-66-7P 131191-67-8P 131191-68-9P  
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 131191-74-7P 131191-75-8P 131191-76-9P 131191-77-0P 131191-78-1P  
 131191-79-2P 131191-80-5P 131191-81-6P 131191-82-7P 131191-83-8P  
 131206-06-9P 131206-09-2P 131206-10-5P  
 RL: AGR (Agricultural use); BAC (Biological activity or  
 effector, except adverse); BSU (Biological study, unclassified); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(prepn. of, as herbicide)

IT 26304-18-7 86798-29-0 131191-54-3 131191-55-4 131191-56-5  
 131191-57-6 131191-58-7 131191-59-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)

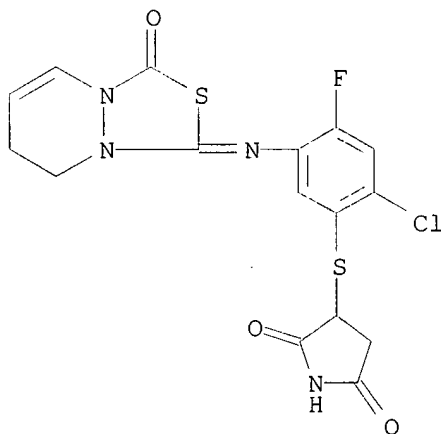
(reaction of, in prepn. of herbicides)

IT 131191-12-3  
 RL: AGR (Agricultural use); RACT (Reactant or reagent)

(hydrolysis of)

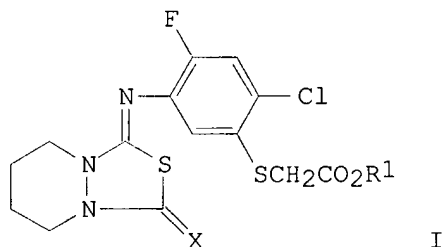
RN 131191-12-3 HCAPLUS

CN 2,5-Pyrrolidinedione, 3-[[2-chloro-5-[(7,8-dihydro-3-oxo-1H,3H-  
 [1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]-4-fluorophenyl]thio]-  
 (9CI) (CA INDEX NAME)



AN 1990:93940 HCAPLUS  
 DN 112:93940  
 TI Preparation of condensed heterocyclic derivatives as herbicides  
 IN Sato, Jun; Fukuda, Kenzo; Ito, Kaoru; Suzuki, Koichi; Nawamaki, Tsutomu;  
 Watanabe, Shigeomi  
 PA Nissan Chemical Industries, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07D513-04  
 ICS A01N043-90  
 ICA C07D237-02  
 CC 5-3 (Agrochemical Bioregulators)  
 Section cross-reference(s): 28  
 FAN.CNT 1

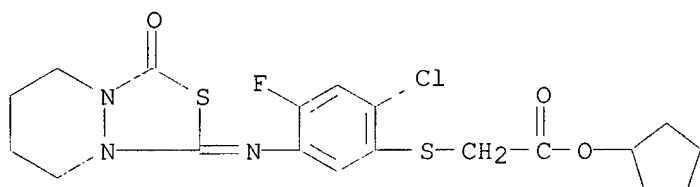
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01186894	A2	19890726	JP 1988-11145	19880121 <--
PRAI	JP 1988-11145		19880121		
OS	MARPAT 112:93940				
GI					



AB Condensed heterocyclic derivs. I (R1 = H, C1-5 alkyl, C3-6 cycloalkyl, CH2CH2Y, CH2CO2R2, CHMeCO2R3; R2, R3 = Me, Et; X = O, S; Y = Cl, Br) are prepd. as herbicides. 1,2-Tetramethylene-1-(2-fluoro-4-chloro-5-cyclopentylloxycarbonylmethylthiophenylthiocarbamoyl)hydrazine (3.31 g) and 1.70 g pyridine in CH2Cl2 was treated with 0.55 mL ClCO2CCl3 at room temp. overnight to give 1.98 g I (R1 = cyclopentyl, X = O) (II) after column chromatog. purifn. II applied, at 0.01 kg/ha, showed .gtoreq.90% control of 7 weed species, without any damage to soybean, whereas acifluorfen-sodium, at 0.32 kg/ha, exhibited poor control of the weeds with some damage to soybean. A wettable powder was prepd. from II 50, Zeeklite PFP (kaolin clay) 43, Sorpol 5050 (anionic surfactant) 2, Runox 1000C (anionic surfactant) 3, and Carplex No.80 2 wt. parts.

ST condensed heterocycle prepn herbicide  
 IT Herbicides  
 (condensed heterocyclic derivs. as)  
 IT 125318-61-8  
 RL: BIOL (Biological study)  
 (condensation of, with hexahydropyridazine deriv.)  
 IT 505-19-1, Hexahydropyridazine  
 RL: BIOL (Biological study)  
 (condensation of, with phenylisothiocyanate)  
 IT 463-71-8, Thiophosgene 503-38-8, Trichloromethyl chloroformate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation of, with phenylthiocarbamoylhydrazine deriv.)  
 IT 125318-60-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation of, with trichloromethyl chloroformate and

thiophosgene)  
 IT 125318-58-3P 125318-59-4P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as herbicide)  
 IT 125318-58-3P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as herbicide)  
 RN 125318-58-3 HCAPLUS  
 CN Acetic acid, [[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]thio]-, cyclopentyl ester (9CI) (CA INDEX NAME)

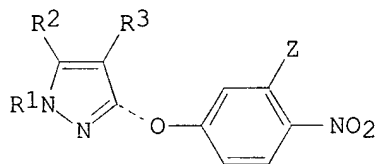


L97 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1989:423509 HCAPLUS  
 DN 111:23509  
 TI Substituted 3-(4-nitrophenoxy)pyrazoles, their herbicidal use and compositions, and processes and intermediates for their preparation  
 IN Moedritzer, Kurt; Lee, Len Fang; Rogers, Michael David; Anderson, Dennis Keith; Singh, Rajendra Kumar; Gaede, Bruce John; Torrence, Lisa Louise  
 PA Monsanto Co., USA  
 SO Eur. Pat. Appl., 338 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C07D231-20  
 ICS C07D231-30; A01N043-56  
 CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5

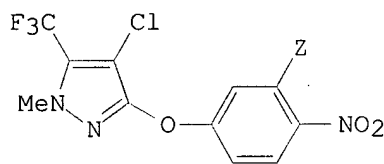
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 295233	A2	19881214	EP 1988-870104	19880607 <--
	EP 295233	A3	19890315		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 4855442	A	19890808	US 1988-175461	19880413 <--
	US 4948902	A	19900814	US 1988-175462	19880413 <--
	AU 8817450	A1	19881208	AU 1988-17450	19880607 <--
	AU 607225	B2	19910228		
	FI 8802680	A	19881209	FI 1988-2680	19880607 <--
	DK 8803086	A	19881209	DK 1988-3086	19880607 <--
	NO 8802509	A	19881209	NO 1988-2509	19880607 <--
	NO 169387	B	19920309		
	NO 169387	C	19920617		
	BR 8802760	A	19881227	BR 1988-2760	19880607 <--
	JP 01025764	A2	19890127	JP 1988-140361	19880607 <--
	JP 05075746	B4	19931021		

CN 1033457	A	19890621	CN 1988-103374	19880607 <--
CN 1021191	B	19930616		
ZA 8804050	A	19900228	ZA 1988-4050	19880607 <--
HU 52063	A2	19900628	HU 1988-2946	19880607 <--
HU 204259	B	19911230		
DD 289461	A5	19910502	DD 1988-316491	19880607 <--
PL 156730	B1	19920430	PL 1988-279592	19880607 <--
PL 156831	B1	19920430	PL 1988-279591	19880607 <--
PL 157154	B1	19920529	PL 1988-272883	19880607 <--
NO 8900595	A	19881209	NO 1989-595	19890210 <--
NO 170276	B	19920622		
NO 170276	C	19920930		
NO 8900596	A	19881209	NO 1989-596	19890210 <--
US 4964895	A	19901023	US 1990-471686	19900130 <--
PRAI US 1987-59431		19870608		
US 1987-59712		19870608		
US 1988-175460		19880413		
US 1988-175461		19880413		
US 1988-175462		19880413		
US 1988-175463		19880413		
NO 1988-2509		19880607		
OS CASREACT 111:23509; MARPAT 111:23509				
GI				



I



II

AB Title compds. I [R1 = Me, Et, halomethyl, haloethyl; R2 = Cl, cyano, halomethyl, haloethyl, MeS, EtS, MeS(O), EtS(O), MeS(O)2, EtS(O)2, MeOCH2; R3 = H, halo, NO2; Z = H, substituent of mol. wt. .ltoreq.300] are prepd. as herbicides. 3-Fluoroacetophenone underwent nitration by fuming HNO3 in the 6-position, followed by condensation with 5-trifluoromethyl-4-chloro-3-hydroxy-1-methylpyrazole to give (trifluoromethyl)chloro(nitrophenoxy)methylpyrazole II (Z = Ac). This underwent oximation by NH2OH.HCl, followed by etherification of the oxime with BrCH2CO2Me, to give II (Z = MeOCOCH2ON:CMe) (III). At 11.21 kg/ha postemergence, III gave 100% control of 9/10 tested weeds, including barnyardgrass, velvetleaf, and Pennsylvania smartweed.

ST nitrophenoxypyrazole prepn herbicide; phenoxypyrazole nitro prepn herbicide; pyrazole nitrophenoxy prepn herbicide

IT Herbicides  
(nitrophenoxy)pyrazoles)

IT Molecular structure-biological activity relationship  
(herbicidal, of (nitrophenoxy)pyrazoles)

IT 121297-32-3 121298-16-6 121299-97-6 121301-48-2  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(herbicidal activity of)

IT 2250-48-8P, 3-Fluoro-6-nitroacetophenone 107638-26-6P,  
4,4,4-Trifluoro-3-amino-2-butenamide 119022-51-4P, 1-Methyl-3-hydroxy-5-trifluoromethylpyrazole 121296-21-7P 121297-22-1P 121297-88-9P  
121302-07-6P 121303-75-1P 121303-80-8P 121303-81-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of, in prepn. of (nitrophenoxy)pyrazole herbicides)

IT	121279-81-0P	121279-83-2P	121279-87-6P	121279-88-7P	121279-91-2P
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	121296-09-1P	121296-10-4P	121296-11-5P	121296-12-6P	121296-13-7P
	121296-14-8P	121296-15-9P	121296-16-0P	121296-17-1P	121296-18-2P
	121296-19-3P	121296-20-6P	121296-21-7P	121296-22-8P	121296-23-9P
	121296-24-0P	121296-25-1P	121296-26-2P	121296-27-3P	121296-28-4P
	121296-29-5P	121296-30-8P	121296-31-9P	121296-32-0P	121296-33-1P
	121296-34-2P	121296-35-3P	121296-36-4P	121296-37-5P	121296-38-6P
	121296-39-7P	121296-40-0P	121296-41-1P	121296-42-2P	121296-43-3P
	121296-44-4P	121296-45-5P	121296-46-6P	121296-47-7P	121296-48-8P
	121296-49-9P	121296-50-2P	121296-51-3P	121296-52-4P	121296-53-5P
	121296-54-6P	121296-55-7P	121296-56-8P	121296-57-9P	121296-58-0P
	121296-59-1P	121296-60-4P	121296-61-5P	121296-62-6P	121296-63-7P
	121296-64-8P	121296-65-9P	121296-66-0P	121296-67-1P	121296-68-2P
	121296-69-3P	121296-70-6P	121296-71-7P	121296-72-8P	121296-73-9P
	121296-74-0P	121296-75-1P	121296-76-2P	121296-77-3P	121296-78-4P
	121296-79-5P	121296-80-8P	121296-81-9P	121296-82-0P	121296-83-1P
	121296-84-2P	121296-85-3P	121296-86-4P	121296-87-5P	121296-88-6P
	121296-89-7P	121296-90-0P	121296-91-1P	121296-92-2P	121296-93-3P
	121296-94-4P	121296-95-5P	121296-96-6P	121296-97-7P	121296-98-8P
	121296-99-9P	121297-00-5P	121297-01-6P	121297-02-7P	121297-03-8P
	121297-04-9P	121297-05-0P	121297-06-1P	121297-07-2P	121297-08-3P
	121297-09-4P	121297-10-7P	121297-11-8P	121297-12-9P	121297-13-0P
	121297-14-1P	121297-15-2P	121297-16-3P	121297-17-4P	121297-18-5P
	121297-19-6P	121297-20-9P	121297-21-0P	121297-22-1P	121297-23-2P
	121297-24-3P	121297-25-4P	121297-26-5P	121297-27-6P	121297-28-7P
	121297-29-8P	121297-30-1P	121297-31-2P	121297-33-4P	121297-34-5P
	121297-35-6P	121297-36-7P	121297-37-8P	121297-38-9P	121297-39-0P
	121297-40-3P	121297-41-4P	121297-42-5P	121297-43-6P	121297-44-7P
	121297-45-8P	121297-46-9P	121297-47-0P	121297-48-1P	121297-49-2P
	121297-50-5P	121297-51-6P	121297-52-7P	121297-53-8P	121297-54-9P
	121297-55-0P	121297-56-1P	121297-57-2P	121297-58-3P	121297-59-4P
	121297-60-7P	121297-61-8P	121297-62-9P	121297-63-0P	121297-64-1P
	121297-65-2P	121297-66-3P	121297-67-4P	121297-68-5P	121297-69-6P
	121297-70-9P	121297-71-0P	121297-72-1P	121297-73-2P	121297-74-3P
	121297-75-4P	121297-76-5P	121297-77-6P	121297-78-7P	121297-79-8P
	121297-80-1P	121297-81-2P	121297-82-3P	121297-83-4P	121297-84-5P
	121297-85-6P	121297-86-7P	121297-87-8P	121297-88-9P	121297-89-0P
	121297-90-3P	121297-91-4P	121297-92-5P	121297-93-6P	121297-94-7P
	121297-95-8P	121297-96-9P	121297-97-0P	121297-98-1P	121297-99-2P
	121298-00-8P	121298-01-9P	121298-02-0P	121298-03-1P	121298-04-2P
	121298-05-3P	121298-06-4P	121298-07-5P	121298-08-6P	121298-09-7P
	121298-10-0P	121298-11-1P	121298-12-2P	121298-13-3P	121298-14-4P
	121298-15-5P	121298-17-7P	121298-18-8P	121298-19-9P	121298-20-2P
	121298-21-3P	121298-22-4P	121298-23-5P	121298-24-6P	121298-25-7P
	121298-26-8P	121298-27-9P	121298-28-0P	121298-29-1P	121298-30-4P
	121298-31-5P	121298-32-6P	121298-33-7P	121298-34-8P	

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as herbicide)

IT	121298-35-9P	121298-36-0P	121298-37-1P	121298-38-2P	121298-39-3P
	121298-40-6P	121298-41-7P	121298-42-8P	121298-43-9P	121298-44-0P
	121298-45-1P	121298-46-2P	121298-47-3P	121298-48-4P	121298-49-5P
	121298-50-8P	121298-51-9P	121298-52-0P	121298-53-1P	121298-54-2P
	121298-55-3P	121298-56-4P	121298-57-5P	121298-58-6P	121298-59-7P
	121298-60-0P	121298-61-1P	121298-62-2P	121298-63-3P	121298-64-4P
	121298-65-5P	121298-66-6P	121298-67-7P	121298-68-8P	121298-69-9P
	121298-70-2P	121298-71-3P	121298-72-4P	121298-73-5P	121298-74-6P
	121298-76-8P	121298-78-0P	121298-79-1P	121298-80-4P	121298-81-5P
	121298-82-6P	121298-83-7P	121298-84-8P	121298-85-9P	121298-86-0P
	121298-87-1P	121298-88-2P	121298-89-3P	121298-90-6P	121298-91-7P
	121298-92-8P	121298-93-9P	121298-94-0P	121298-95-1P	121298-96-2P

121298-97-3P	121298-98-4P	121298-99-5P	121299-00-1P	121299-01-2P
121299-02-3P	121299-03-4P	121299-04-5P	121299-05-6P	121299-06-7P
121299-07-8P	121299-08-9P	121299-09-0P	121299-10-3P	121299-11-4P
121299-12-5P	121299-13-6P	121299-14-7P	121299-15-8P	121299-16-9P
121299-17-0P	121299-18-1P	121299-19-2P	121299-20-5P	121299-21-6P
121299-22-7P	121299-23-8P	121299-24-9P	121299-25-0P	121299-26-1P
121299-27-2P	121299-28-3P	121299-29-4P	121299-30-7P	121299-31-8P
121299-32-9P	121299-33-0P	121299-34-1P	121299-35-2P	121299-36-3P
121299-37-4P	121299-38-5P	121299-39-6P	121299-40-9P	121299-41-0P
121299-42-1P	121299-43-2P	121299-44-3P	121299-45-4P	121299-46-5P
121299-47-6P	121299-48-7P	121299-49-8P	121299-50-1P	121299-51-2P
121299-52-3P	121299-53-4P	121299-54-5P	121299-55-6P	121299-56-7P
121299-57-8P	121299-58-9P	121299-59-0P	121299-60-3P	121299-61-4P
121299-62-5P	121299-63-6P	121299-64-7P	121299-65-8P	121299-66-9P
121299-67-0P	121299-68-1P	121299-69-2P	121299-70-5P	121299-71-6P
121299-72-7P	121299-73-8P	121299-74-9P	121299-75-0P	121299-76-1P
121299-77-2P	121299-78-3P	121299-79-4P	121299-80-7P	121299-81-8P
121299-82-9P	121299-83-0P	121299-84-1P	121299-85-2P	121299-86-3P
121299-87-4P	121299-88-5P	121299-89-6P	121299-90-9P	121299-91-0P
121299-92-1P	121299-93-2P	121299-94-3P	121299-95-4P	121299-96-5P
121299-98-7P	121299-99-8P	121300-00-3P	121300-01-4P	121300-02-5P
121300-03-6P	121300-04-7P	121300-05-8P	121300-06-9P	
121300-07-0P	121300-08-1P	121300-09-2P	121300-10-5P	121300-11-6P
121300-12-7P	121300-13-8P	121300-14-9P	121300-15-0P	121300-16-1P
121300-17-2P	121300-18-3P	121300-19-4P	121300-20-7P	121300-21-8P
121300-22-9P	121300-23-0P	121300-24-1P	121300-25-2P	121300-26-3P
121300-27-4P	121300-28-5P	121300-29-6P	121300-30-9P	121300-31-0P
121300-32-1P	121300-33-2P	121300-34-3P	121300-35-4P	121300-36-5P
121300-37-6P	121300-38-7P	121300-39-8P	121300-40-1P	121300-41-2P
121300-42-3P	121300-43-4P	121300-44-5P	121300-45-6P	121300-46-7P
121300-47-8P	121300-48-9P	121300-49-0P	121300-50-3P	121300-51-4P
121300-52-5P	121300-53-6P	121300-54-7P	121300-55-8P	121300-56-9P
121300-57-0P	121300-58-1P	121300-59-2P	121300-60-5P	121300-61-6P
121300-62-7P	121300-63-8P	121300-64-9P	121300-65-0P	121300-66-1P
121300-67-2P	121300-68-3P	121300-69-4P	121300-70-7P	121300-71-8P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

	(prepn. of, as herbicide)			
IT	121300-72-9P	121300-73-0P	121300-74-1P	121300-75-2P
	121300-77-4P	121300-78-5P	121300-79-6P	121300-80-9P
	121300-82-1P	121300-83-2P	121300-84-3P	121300-85-4P
	121300-87-6P	121300-88-7P	121300-89-8P	121300-90-1P
	121300-92-3P	121300-93-4P	121300-94-5P	121300-95-6P
	121300-97-8P	121300-98-9P	121300-99-0P	121301-00-6P
	121301-02-8P	121301-03-9P	121301-04-0P	121301-05-1P
	121301-07-3P	121301-08-4P	121301-09-5P	121301-10-8P
	121301-12-0P	121301-13-1P	121301-14-2P	121301-15-3P
	121301-17-5P	121301-18-6P	121301-19-7P	121301-20-0P
	121301-22-2P	121301-23-3P	121301-24-4P	121301-25-5P
	121301-27-7P	121301-28-8P	121301-29-9P	121301-30-2P
	121301-32-4P	121301-33-5P	121301-34-6P	121301-35-7P
	121301-37-9P	121301-38-0P	121301-39-1P	121301-40-4P
	121301-42-6P	121301-43-7P	121301-44-8P	121301-45-9P
	121301-47-1P	121301-49-3P	121301-50-6P	121301-51-7P
	121301-53-9P	121301-54-0P	121301-55-1P	121301-56-2P
	121301-58-4P	121301-59-5P	121301-60-8P	121301-61-9P
	121301-63-1P	121301-64-2P	121301-65-3P	121301-66-4P
	121301-68-6P	121301-69-7P	121301-70-0P	121301-71-1P
	121301-73-3P	121301-74-4P	121301-75-5P	121301-76-6P
	121301-78-8P	121301-79-9P	121301-80-2P	121301-81-3P
	121301-83-5P	121301-84-6P	121301-85-7P	121301-86-8P
				121301-87-9P

121301-88-0P	121301-89-1P	121301-90-4P	121301-91-5P	121301-92-6P
121301-93-7P	121301-94-8P	121301-95-9P	121301-96-0P	121301-97-1P
121301-98-2P	121301-99-3P	121302-00-9P	121302-01-0P	121302-02-1P
121302-03-2P	121302-04-3P	121302-05-4P	121302-06-5P	121302-07-6P
121302-08-7P	121302-09-8P	121302-10-1P	121302-11-2P	121302-12-3P
121302-13-4P	121302-14-5P	121302-15-6P	121302-16-7P	121302-17-8P
121302-18-9P	121302-19-0P	121302-20-3P	121302-21-4P	121302-22-5P
121302-23-6P	121302-24-7P	121302-25-8P	121302-26-9P	121302-27-0P
121302-28-1P	121302-29-2P	121302-30-5P	121302-31-6P	121302-32-7P
121302-33-8P	121302-34-9P	121302-35-0P	121302-36-1P	121302-37-2P
121302-38-3P	121302-39-4P	121302-40-7P	121302-41-8P	121302-42-9P
121302-43-0P	121302-44-1P	121302-45-2P	121302-46-3P	121302-47-4P
121302-48-5P	121302-49-6P	121302-50-9P	121302-51-0P	121302-52-1P
121302-53-2P	121302-54-3P	121302-55-4P	121302-56-5P	121302-57-6P
121302-58-7P	121302-59-8P	121302-60-1P	121302-61-2P	121302-62-3P
121302-63-4P	121302-64-5P	121302-65-6P	121302-66-7P	121302-67-8P
121302-68-9P	121302-69-0P	121302-70-3P	121302-71-4P	121302-72-5P
121302-73-6P	121302-74-7P	121302-75-8P	121302-76-9P	121302-77-0P
121302-78-1P	121302-79-2P	121302-80-5P	121302-81-6P	121302-82-7P
121302-83-8P	121302-84-9P	121302-85-0P	121302-86-1P	121302-87-2P
121302-88-3P	121302-89-4P	121302-90-7P	121302-91-8P	121302-93-0P
121302-94-1P	121302-95-2P	121302-96-3P	121302-97-4P	121302-98-5P
121302-99-6P	121303-00-2P	121303-01-3P	121303-02-4P	121303-03-5P
121303-04-6P	121303-05-7P	121303-06-8P	121303-07-9P	

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

IT	121303-08-0P	121303-09-1P	121303-10-4P	121303-11-5P	121303-12-6P
	121303-13-7P	121303-14-8P	121303-15-9P	121303-16-0P	121303-17-1P
	121303-18-2P	121303-19-3P	121303-20-6P	121303-21-7P	121303-22-8P
	121303-23-9P	121303-24-0P	121303-25-1P	121303-26-2P	121303-27-3P
	121303-28-4P	121303-29-5P	121303-30-8P	121303-31-9P	121303-32-0P
	121303-33-1P	121303-34-2P	121303-35-3P	121303-36-4P	121303-37-5P
	121303-38-6P	121303-39-7P	121303-40-0P	121303-41-1P	121303-42-2P
	121303-43-3P	121303-44-4P	121303-45-5P	121303-46-6P	121303-47-7P
	121303-48-8P	121303-49-9P	121303-50-2P	121303-51-3P	121303-52-4P
	121303-53-5P	121303-54-6P	121303-55-7P	121303-56-8P	121303-57-9P
	121303-58-0P	121303-59-1P	121303-60-4P	121303-61-5P	121303-62-6P
	121303-63-7P	121303-64-8P	121303-65-9P	121303-66-0P	121303-67-1P
	121303-68-2P	121303-69-3P	121303-70-6P	121303-71-7P	121303-72-8P
	121303-73-9P	121303-74-0P	121303-83-1P	121303-84-2P	121303-85-3P
	121303-86-4P	121303-87-5P	121303-88-6P	121303-89-7P	121303-90-0P
	121303-91-1P	121303-92-2P	121303-93-3P	121303-94-4P	121303-95-5P
	121303-96-6P	121303-97-7P	121303-98-8P	121303-99-9P	121304-00-5P
	121304-01-6P	121304-02-7P	121304-03-8P	121304-04-9P	121304-05-0P
	121304-06-1P	121304-07-2P	121304-08-3P	121304-09-4P	121304-10-7P
	121304-11-8P	121304-12-9P	121304-13-0P	121304-14-1P	121304-15-2P
	121304-16-3P	121304-17-4P	121304-18-5P	121304-19-6P	121304-20-9P
	121304-21-0P	121304-22-1P	121304-23-2P	121304-24-3P	121304-25-4P
	121304-26-5P	121304-27-6P	121304-28-7P	121304-29-8P	121304-30-1P
	121304-31-2P	121304-32-3P	121304-33-4P	121304-34-5P	121304-35-6P
	121304-36-7P	121304-37-8P	121304-38-9P	121304-39-0P	121304-40-3P
	121304-41-4P	121304-42-5P	121304-43-6P	121304-44-7P	121304-45-8P
	121304-46-9P	121304-47-0P	121304-48-1P	121304-49-2P	121304-50-5P
	121304-51-6P	121304-52-7P	121304-53-8P	121304-54-9P	121304-55-0P
	121304-56-1P	121304-57-2P	121304-58-3P	121304-59-4P	121304-60-7P
	121304-61-8P	121304-62-9P	121304-63-0P	121304-64-1P	121304-65-2P
	121304-66-3P	121304-67-4P	121304-68-5P	121304-69-6P	121304-70-9P
	121304-71-0P	121304-72-1P	121304-73-2P	121304-74-3P	121304-75-4P
	121304-76-5P	121304-77-6P	121304-78-7P	121304-79-8P	121304-80-1P
	121304-81-2P	121304-82-3P	121304-83-4P	121304-84-5P	121304-85-6P
	121304-86-7P	121304-87-8P	121304-88-9P	121304-89-0P	121304-90-3P

121321-83-3P 121321-84-4P 121321-85-5P 121321-86-6P 121321-87-7P  
 121321-88-8P 121321-89-9P 121321-90-2P 121321-91-3P 121321-92-4P  
 121321-93-5P 121321-94-6P 121321-95-7P 121321-96-8P 121321-97-9P  
 121321-98-0P 121321-99-1P 121322-00-7P 121322-01-8P 121322-02-9P  
 121322-03-0P 121322-04-1P 121322-05-2P 121322-06-3P 121322-07-4P  
 121322-08-5P 121322-09-6P 121322-10-9P 121322-11-0P 121322-12-1P  
 121322-13-2P 121339-92-2P 122180-48-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

IT 57-14-7, N,N-Dimethylhydrazine 60-34-4, Methylhydrazine 74-89-5, Methylamine, preparation 75-04-7, Ethylamine, reactions 75-61-6, Dibromodifluoromethane 96-32-2, Methyl bromoacetate 109-89-7, Diethylamine, reactions 446-33-3, 4-Fluoro-2-methylnitrobenzene 446-35-5, 2,4-Difluoronitrobenzene 448-19-1, 4-Fluoro-2-methoxynitrobenzene 455-36-7 3144-09-0, Methanesulfonamide 5470-11-1, Hydroxylamine hydrochloride 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 51282-49-6, 4-Chloro-2-methoxycarbonylnitrobenzene 51282-56-5, 4-Chloro-2-ethoxycarbonylnitrobenzene 77207-00-2 92607-62-0 92607-63-1 107638-19-7, Methyl 4,4,4-trifluoro-3-amino-2-butenate 119022-51-4, 5-Trifluoromethyl-3-hydroxy-1-methylpyrazole 121298-39-3 121303-76-2, Ethyl 3-methylamino-4,4,4-trifluoro-2-butenate 121303-77-3, 4-Fluoro-2-(ethoxycarbonylmethyl)nitrobenzene 121303-78-4, 5-Trifluoromethyl-4-chloro-3-hydroxy-1-methylpyrazole 121303-79-5, 5-Pentafluoroethyl-4-chloro-3-hydroxy-1-methylpyrazole 121303-82-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of (nitrophenoxy)pyrazole herbicides)

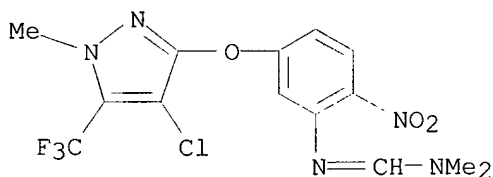
IT 121300-04-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

RN 121300-04-7 HCAPLUS

CN Methanimidamide, N'-[5-[[4-chloro-1-methyl-5-(trifluoromethyl)-1H-pyrazol-3-yl]oxy]-2-nitrophenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L97 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1989:212812 HCAPLUS

DN 110:212812

TI Condensed imino-azoles and imino-azines, processes for their preparation, and their use as agents with herbicidal activity

IN Franke, Wilfried; Blume, Friedhelm; Arndt, Friedrich; Rees, Richard

PA Schering A.-G., Fed. Rep. Ger.

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C07D513-04

ICS C07D498-04; A01N043-90



ICI C07D513-04, C07D277-00, C07D209-00; C07D513-04, C07D277-00, C07D221-00;  
C07D498-04, C07D263-00, C07D221-00; C07D498-04, C07D263-00, C07D209-00;  
C07D513-04, C07D279-00, C07D221-00

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 298405	A2	19890111	EP 1988-110642	19880704 <--
	EP 298405	A3	19900509		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DE 3722827	A1	19890119	DE 1987-3722827	19870707 <--
	FI 8803183	A	19890108	FI 1988-3183	19880704 <--
	DD 285283	A5	19901212	DD 1988-317594	19880705 <--
	JP 01070493	A2	19890315	JP 1988-167021	19880706 <--
	HU 47394	A2	19890328	HU 1988-3550	19880706 <--
	US 5131946	A	19920721	US 1988-215600	19880706 <--
	SU 1779220	A3	19921130	SU 1988-4356065	19880706 <--
	DK 8803784	A	19890108	DK 1988-3784	19880707 <--
	AU 8818809	A1	19890112	AU 1988-18809	19880707 <--
	AU 616893	B2	19911114		
	CN 1030420	A	19890118	CN 1988-104218	19880707 <--
	BR 8803400	A	19890124	BR 1988-3400	19880707 <--
	ZA 8804893	A	19890329	ZA 1988-4893	19880707 <--

PRAI DE 1987-3722827 19870707

OS MARPAT 110:212812

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R1 = H, (halo)-C1-3 alkyl; R2-R13 = H, (halo)-C1-4 alkyl, -alkoxy, -alkylthio; pairs of R2-R13 = alkylidene groups; A = (CR6R7)n; B = O; CR8R9; D = (CR10R11)n; E = CR12R13; W = S(O)m; X, Y = H, halo; Z = H, halo, trihalomethyl, amino, (substituted) carboxylate, hydroxyl, thiol; m = 0-2; n = 0, 1], useful as herbicides, were prepd. 2-Hydroxymethylpyrrolidine and 4-chloro-2-fluoro-5-mesyloxyphenyl isothiocyanate were refluxed 4 h in dioxane to give 87% 3-(4-chloro-2-fluoro-5-mesyloxyphenylimino)tetrahydro-1H,3H-pyrrolo[1,2-c]thiazole. Several I at 0.1 kg/ha preemergent gave complete kill of Solanum species, Phaseolus vulgaris, and Abutilon hybridum without toxicity to rice.

ST aryliminoazole aryliminoazine prepn herbicide; wheat soybean herbicide  
arylimidazole aryliminoazine

IT Herbicides

(arylamino azoles and azines)

IT Cyclocondensation reaction

(of aryl isothiocyanates with hydroxyalkyl azoles and azines)

IT 75-26-3, 2-Bromopropane

RL: RCT (Reactant); RACT (Reactant or reagent)

(alkylation by, of hydroxyphenyliminooxazolyipyridine)

IT 120428-88-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(alkylation of, in prepn. of herbicide)

IT 2740-81-0, 2-Chlorophenyl isothiocyanate

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with hydroxymethylpiperidine, in prepn. of herbicide)

IT 86798-42-7, 4-Chloro-2-fluoro-5-methoxyphenyl isothiocyanate

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with hydroxyethylpiperidine)

IT 622-44-6, Phenyl isocyanide dichloride

RL: RCT (Reactant); RACT (Reactant or reagent)

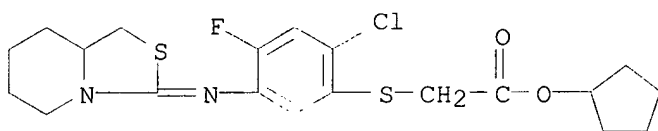
(cyclocondensation of, with hydroxymethylpiperidine, in prepn. of herbicide)

IT 54160-32-6

RL: RCT (Reactant); RACT (Reactant or reagent)

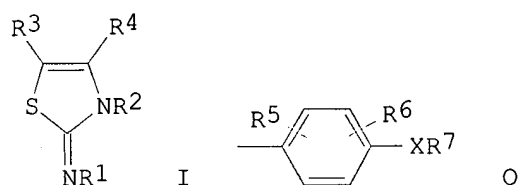
(cyclocondensation of, with substituted Ph isothiocyanate, in prepn. of

herbicide)  
 IT 120429-28-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and cyclization of, in prepn. of herbicide)  
 IT 120428-83-3P 120428-84-4P 120428-85-5P 120428-86-6P 120428-87-7P  
 120428-88-8P 120428-89-9P 120428-90-2P 120428-91-3P 120428-92-4P  
 120428-93-5P 120428-94-6P 120428-95-7P 120428-96-8P 120428-97-9P  
 120428-98-0P 120428-99-1P 120429-00-7P 120429-01-8P 120429-02-9P  
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 120429-08-5P 120429-09-6P 120429-10-9P 120429-11-0P 120429-12-1P  
 120429-13-2P 120429-14-3P 120429-15-4P 120429-16-5P 120429-17-6P  
 120429-18-7P 120429-19-8P 120429-20-1P 120429-21-2P 120429-22-3P  
 120429-23-4P 120429-24-5P 120429-25-6P 120429-26-7P 120429-27-8P  
 120457-40-1P 120457-41-2P 120457-42-3P 120457-43-4P  
 120457-44-5P 120478-20-8P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as herbicide)  
 IT 120457-44-5P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as herbicide)  
 RN 120457-44-5 HCAPLUS  
 CN Acetic acid, [[2-chloro-4-fluoro-5-[(hexahydro-3H-thiazolo[3,4-a]pyridin-3-ylidene)amino]phenyl]thio]-, cyclopentyl ester (9CI) (CA INDEX NAME)



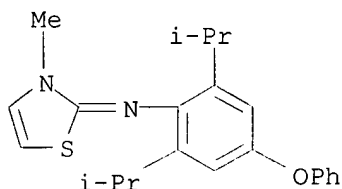
L97 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1989:192810 HCAPLUS  
 DN 110:192810  
 TI Preparation of thiazoline derivatives as acaricides and insecticides  
 IN Nagasaki, Fumihiko; Yamada, Tomio; Takahashi, Eiko; Kitagawa, Yukio; Hatano, Renpei  
 PA Nippon Soda Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07D277-42  
 ICS C07D417-12  
 CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 5  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63250371	A2	19881018	JP 1987-82455	19870403 <--
	JP 07116168	B4	19951213		
PRAI	JP 1987-82455		19870403		
OS	MARPAT 110:192810				
GI					



- AB Title compds. I [R<sup>1</sup>, R<sup>2</sup> = (Ph-substituted) alkyl, cycloalkyl, Q wherein R<sup>5</sup> = alkyl, alkylamino, R<sup>6</sup> = H, alkyl, alkylamino, R<sup>7</sup> = (halo- or haloalkyl-substituted) Ph or pyridyl; X = O, S; at least one of R<sup>1</sup> and R<sup>2</sup> = Q; R<sup>3</sup>, R<sup>4</sup> = H, halo, (halo-substituted) alkyl or Ph] are prepd. by cyclocondensation of R<sup>1</sup>NHC(:S)NHR<sup>2</sup> with R<sup>3</sup>CHX<sup>1</sup>CR<sup>4</sup>R<sup>8</sup>R<sup>9</sup> (X<sup>1</sup> = halo; R<sup>8</sup>, R<sup>9</sup> = alkoxy or R<sup>1</sup>R<sup>2</sup> = O). A soln. of ClCH<sub>2</sub>COMe and 2,6,4-Me<sub>2</sub>(PhO)C<sub>6</sub>H<sub>2</sub>NHC(:S)NHCMe<sub>3</sub> in EtCOMe was refluxed to give I [R<sup>1</sup> = Me<sub>3</sub>C; R<sup>2</sup> = 2,6,4-Me<sub>2</sub>(PhO)C<sub>6</sub>H<sub>2</sub>; R<sup>3</sup> = H; R<sup>4</sup> = Me], which at 125 ppm showed 100% control of imagoes of *Tetranychus urticae*, vs. 0% for a known I [R<sup>1</sup> = p-(p-ClC<sub>6</sub>H<sub>4</sub>O)C<sub>6</sub>H<sub>4</sub>; R<sup>2</sup> = R<sup>4</sup> = Me; R<sup>3</sup> = H]. An emulsion was formulated contg. I 10, alkyl phenyl polyoxyethylene 5, DMF 50, and xylene 35 parts.
- ST thiazoline prepn acaricide insecticide
- IT Acaricides  
Insecticides  
(thiazoline derivs.)
- IT 80060-09-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with bromoacetaldehyde acetal)
- IT 78460-18-1  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with chloroacetone)
- IT 78-95-5, Chloroacetone 2032-35-1, Bromoacetaldehyde diethyl acetal  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with thiourea deriv.)
- IT 120258-70-0P 120258-71-1P 120258-72-2P  
120258-73-3P 120258-74-4P 120258-75-5P  
120258-76-6P 120258-77-7P 120258-78-8P  
120258-79-9P 120258-80-2P 120258-81-3P  
120258-82-4P 120258-83-5P 120258-84-6P  
120258-85-7P 120258-86-8P 120258-87-9P  
120258-88-0P 120258-89-1P 120258-90-4P  
120258-91-5P 120258-92-6P 120258-93-7P  
120258-94-8P 120258-95-9P 120258-96-0P  
120258-97-1P 120258-98-2P 120258-99-3P  
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120259-14-5P 120259-15-6P 120259-16-7P 120259-17-8P 120259-18-9P  
120259-19-0P 120292-04-8P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as insecticide and acaricide)
- IT 120258-70-0P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as insecticide and acaricide)
- RN 120258-70-0 HCAPLUS

CN Benzenamine, 2,6-bis(1-methylethyl)-N-(3-methyl-2(3H)-thiazolylidene)-4-phenoxy- (9CI) (CA INDEX NAME)



L97 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1987:1787 HCAPLUS

DN 106:1787

TI Effects of diazepam and chlordimeform analogs on the German and the American cockroaches

AU Ozoe, Yoshihisa; Matsumura, Fumio

CS Pestic. Res. Cent., Michigan State Univ., East Lansing, MI, 48824-1311, USA

SO Pesticide Biochemistry and Physiology (1986), 26(3), 253-62

CODEN: PCBPBS; ISSN: 0048-3575

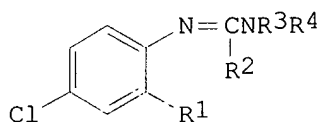
DT Journal

LA English

CC 5-4 (Agrochemical Bioregulators)

Section cross-reference(s): 25, 28

GI



I

AB Twenty-one diazepam- and chlordimeform (CDM) [6164-98-3]-related compds. I (R1 = Me, Bz, CF3, CN, alkenyl; R2, R3 = H, Me; R4 = Me, NO, CH2C.tplbond.CH, CH2CO2Et) were synthesized by mimicking some parts of the 1,4-benzodiazepine tranquilizers, and were tested for their insecticidal activity against the German cockroach. Some of these compds. showed knockdown effects and some were insecticidal. Against the German cockroach the most toxic CDM analog was N-propargyl CDM [105687-50-1], and that with a potent knockdown potency was I (R1 = Bz; R2-4 = Me) [49691-58-9] which has a structural resemblance to diazepam. Ligand-receptor binding assay was carried out, using [3H]diazepam as a ligand to examine the relation between CDM-related compds. and the 1,4-benzodiazepines. The [3H]diazepam binding to a specific site in the American cockroach brain was inhibited by the insecticidal compds. Among these compds. a correlation exists between their inhibitory potency of specific [3H]diazepam binding and their insecticidal activity, suggesting a possible significance of such an interaction with the diazepam-binding site for the toxicity of these compds. against cockroaches.

ST diazepam chlordimeform insecticide cockroach

IT Blattella germanica

Periplaneta americana

(chlordimeform and diazepam analogs insecticidal activity against)

IT Nerve center and Ganglion

(chlordimeform and diazepam analogs toxicity to, of cockroach)

IT Insecticides  
(chlordimeform and diazepam analogs, against American and German cockroach)

IT 58-25-3 69954-48-9 78755-81-4  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
(insecticidal activity of, against German cockroach)

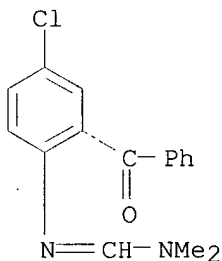
IT 6164-98-3DP, analogs 6164-98-3P 21787-80-4P 39263-33-7P  
40678-73-7P 42016-57-9P 56531-97-6P 92085-19-3P  
103254-17-7P 103976-13-2P 105687-51-2P 105687-52-3P  
105687-53-4P 105687-54-5P 105687-55-6P 105687-56-7P 105687-57-8P  
105687-58-9P 105687-59-0P 105687-60-3P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. and insecticidal activity of, against American and German cockroach)

IT 49691-58-9P 105687-50-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

IT 40678-73-7P  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. and insecticidal activity of, against American and German cockroach)

RN 40678-73-7 HCAPLUS

CN Methanimidamide, N'-(2-benzoyl-4-chlorophenyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



L97 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1986:460608 HCAPLUS

DN 105:60608

TI Phenylimino-substituted fused, bicyclic azoles

IN Hagiwara, Kenji; Ishikawa, Hisao; Hosaka, Hideo; Inaba, Hideo

PA Nippon Soda Co., Ltd., Japan

SO Ger. Offen., 105 pp.  
CODEN: GWXXBX

DT Patent

LA German

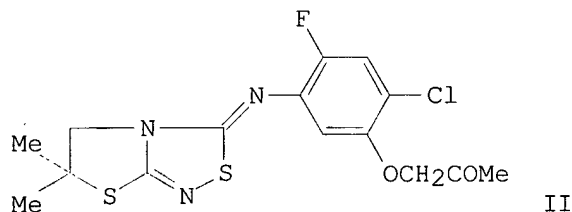
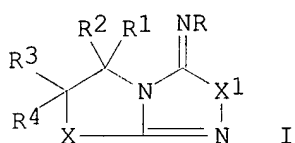
IC ICM C07D513-04  
ICS C07D498-04; A01N043-90

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 5

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 3528583	A1	19860213	DE 1985-3528583	19850808 <--
	DE 3528583	C2	19891012		
	JP 61043192	A2	19860301	JP 1984-164855	19840808 <--
	JP 61161288	A2	19860721	JP 1985-1446	19850110 <--
	US 4812161	A	19890314	US 1985-760158	19850729 <--
	CA 1253504	A1	19890502	CA 1985-488019	19850802 <--
	RO 96413	B3	19900213	RO 1985-127334	19850806 <--
	FR 2568881	A1	19860214	FR 1985-12111	19850807 <--
	FR 2568881	B1	19881230		
	BR 8503732	A	19860513	BR 1985-3732	19850807 <--
	SU 1706370	A3	19920115	SU 1985-3939370	19850807 <--
	GB 2163427	A1	19860226	GB 1985-19896	19850808 <--
	GB 2163427	B2	19871125		
	ES 546006	A1	19870216	ES 1985-546006	19850808 <--
	CH 666691	A	19880815	CH 1985-3409	19850808 <--
	SU 1746884	A3	19920707	SU 1986-4013917	19860127 <--
	ES 552943	A1	19871016	ES 1986-552943	19860312 <--
	ES 552944	A1	19871016	ES 1986-552944	19860312 <--
PRAI	JP 1984-164855		19840808		
	JP 1985-1446		19850110		
OS	CASREACT 105:60608				
GI					



AB The title compds. [I; R = (un)substituted Ph; R1-R4 = H, OH, R5O, R5S, R5CO2, R5O2C; R5 = (un)substituted hydrocarbonyl; X = (CR6R7)nZ; X1 = O, S(O)n; Z = R8N, R6R7C, X1; R6-R8 = R1; n = 0, 1; R1-R8 optionally form addnl. rings] were prepd. (.apprx.740 compds.). Thus, 1.5 g 2-amino-5,5-dimethyl-2-thiazoline and 3.0 g 2,4,5-FC1(SCN)C6H2OCH2COMe were stirred at 0.degree. in CH2Cl2 followed by addn. of pyridine and Br and stirring 30 min to give 2.5 g thiazolothiadiazole II. I are effective herbicides against a variety of weeds at 25-50 g/10 ar with little or no damage to rice or soybeans.

ST phenyliminothiazolthiadiazole prepn herbicide; aminoazole oxidative cyclocondensation phenyl isocyanate; thiazolothiadiazole; thiazolooxadiazole; oxazolothiadiazole; pyrrolthiadiazole

IT Herbicides

IT ((phenylimino)thiazolthiadiazoles and analogs)

IT Cyclocondensation reaction

IT (oxidative, of aminoazoles with Ph iso(thio)cyanates)

IT 102800-74-8

IT RL: RCT (Reactant); RACT (Reactant or reagent)

IT (cyclocondensation of, with (hydroxyimino)azoles and aminopyridines)

IT 22780-54-7 102800-73-7

IT RL: RCT (Reactant); RACT (Reactant or reagent)

IT (cyclocondensation of, with Ph isocyanide dichlorides)

IT 535-11-5

IT RL: RCT (Reactant); RACT (Reactant or reagent)

IT (esterification by, of benzoic acid deriv.)

IT 4187-87-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (esterification of, by pyrrolothiadiazolecarbonyl chloride deriv.)

IT 21233-47-6 68210-19-5 102800-70-4 102800-72-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidative cyclocondensation of, with Ph iso(thio)cyanates)

IT 102800-68-0 102800-69-1 102800-71-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidative cyclocondensation of, with aminoazoles)

IT 102825-69-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and cyclocondensation of, with (hydroxyimino)azoles and  
 aminopyridines)

IT 102800-75-9P 102800-77-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and esterification of)

IT 102800-76-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and O-acetylation of)

IT 102796-81-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 100674-56-4P 100674-57-5P 100674-58-6P 100674-59-7P 100674-60-0P  
 100674-61-1P 100674-62-2P 100674-63-3P 100674-64-4P 100674-65-5P  
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 102776-75-0P 102776-76-1P 102776-77-2P 102776-78-3P 102776-79-4P  
 102776-80-7P 102776-81-8P 102776-82-9P 102776-83-0P 102776-84-1P  
 102776-85-2P 102776-86-3P 102776-87-4P 102796-36-1P 102796-37-2P  
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RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

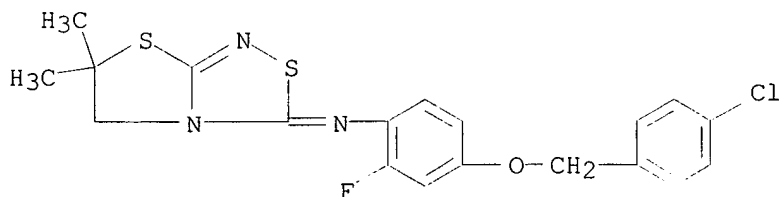
IT 68-11-1, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (substitution reaction of, with diazotized aniline deriv.)

IT 79-04-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (O-acylation by, of propionamidoxime deriv.)

IT 102796-48-5P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)

RN 102796-48-5 HCAPLUS  
 CN Benzenamine, 4-[(4-chlorophenyl)methoxy]-N-(5,6-dihydro-6,6-dimethyl-3H-thiazolo[2,3-c][1,2,4]thiadiazol-3-ylidene)-2-fluoro- (9CI) (CA INDEX NAME)

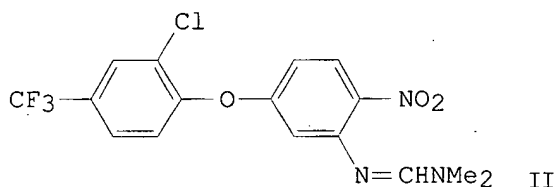
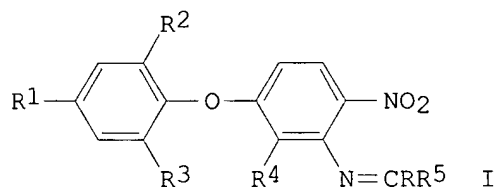


L97 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1982:438658 HCAPLUS  
 DN 97:38658  
 TI 3-Phenoxymethylenanilines as herbicides  
 IN Durr, Dieter  
 PA Ciba-Geigy A.-G. , Switz.  
 SO Eur. Pat. Appl., 25 pp.  
 CODEN: EPXXDW

DT Patent  
 LA German  
 IC C07C123-00; C07C119-18; C07D295-18; A01N037-52; A01N043-84; A01N043-40  
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 46445	A1	19820224	EP 1981-810319	19810810 <--
	EP 46445	B1	19840613		
	R: BE, CH, DE, FR, GB, NL				
	US 4389236	A	19830621	US 1981-289582	19810803 <--
	CA 1197518	A1	19851203	CA 1981-383817	19810813 <--
	JP 57054154	A2	19820331	JP 1981-128115	19810815 <--
PRAI	CH 1980-6198		19800815		
GI					



AB I (R = C1-4 alkoxy or NR6R7; R1 = H or C1-2 haloalkyl; R2-4 = H or halo; R5 = H or C1-4 alkyl; R6 = H or C1-4 alkyl, alkenyl, alkynyl; R7 = H or C1-4 alkyl) were prep'd. and shown to have herbicidal activity. Thus, 2,4-C1(F3C)C6H3OC6H3(NO2)2-3,4 was ammonolyzed in an autoclave to give 2,4-C1(F3C)C6H3OC6H3(NH2)(NO2)-3,4, which with MeC(OEt)2NMe2 gave II.

ST aryloxy nitro anil herbicide

IT Herbicides  
 (methylenenitrophenoxyanilines)

IT 71980-08-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (aminolysis of)

IT 81700-96-1P 81700-97-2P 81700-98-3P  
 81700-99-4P 81701-00-0P 81701-01-1P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and herbicidal activity of)

IT 42874-46-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reaction with DMF di-Et acetal)

IT 1188-33-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with aniline deriv.)

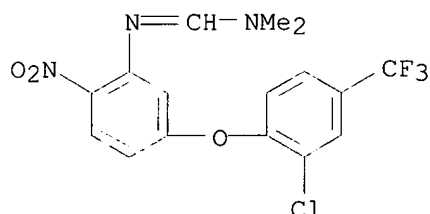
IT 81700-96-1P  
 RL: AGR (Agricultural use); BAC (Biological activity or

effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and herbicidal activity of)

RN 81700-96-1 HCAPLUS

CN Methanimidamide, N'-[5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrophenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L97 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2003 ACS

AN 1978:121227 HCAPLUS

DN 88:121227

TI Triazapentadienes useful as miticides

IN Leeming, Michael Raymond Graves; Penrose, Alexander Ballingall

PA Pfizer Corp., Panama

SO Ger. Offen., 87 pp.

CODEN: GWXXBX

DT Patent

LA German

IC C07D213-74

CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 5, 25, 27

FAN.CNT 1

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PI	DE 2717280	A1	19771110	DE 1977-2717280	19770419 <--
	DE 2717280	B2	19801106		
	DE 2717280	C3	19810702		
	ZA 7701561	A	19780125	ZA 1977-1561	19770315 <--
	US 4128652	A	19781205	US 1977-787084	19770413 <--
	BE 853713	A1	19771018	BE 1977-176816	19770418 <--
	FI 7701222	A	19771021	FI 1977-1222	19770418 <--
	NL 7704190	A	19771024	NL 1977-4190	19770418 <--
	NL 170732	B	19820716		
	NL 170732	C	19821216		
	ES 457914	A1	19780716	ES 1977-457914	19770418 <--
	DK 7701721	A	19771021	DK 1977-1721	19770419 <--
	FR 2348920	A1	19771118	FR 1977-11725	19770419 <--
	FR 2348920	B1	19800208		
	BR 7702457	A	19780502	BR 1977-2457	19770419 <--
	GB 1510073	A	19780510	GB 1976-15812	19770419 <--
	CH 604512	A	19780915	CH 1977-4824	19770419 <--
	JP 52128375	A2	19771027	JP 1977-45617	19770420 <--
	JP 54001709	B4	19790127		
	US 4186264	A	19800129	US 1978-943665	19780918 <--
PRAI	GB 1976-15812		19760420		
	GB 1976-34319		19760818		
	US 1977-787084		19770413		

AB Seventy-five 2,4-MeRC6H3N:CHNMeCR1:NR2 (I; R = Cl or Me; R1 = a carbon-attached arom. N heterocycle, e.g., 3-pyridyl, 2-thiazolyl; R2 = H, Me, or Et) were prepd. by the addn. reaction of 2,4-MeRC6H3NC with R1N:CR2NHMe, and 16 I (R = Me, R1 = a carbon-attached arom. N heterocycle,

R2 = H) were prepd. by the condensation of 2,4-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>N:CHNHMe with R<sub>1</sub>N:CHOEt. Of the 91 I thus prepd., 74 were evaluated as miticides and most of those tested showed excellent activity. The prepn. of many of the R<sub>1</sub>N:CR<sub>2</sub>NHMe and R<sub>1</sub>N:CHOEt was described also.

ST triazapentadiene aryl heterocyclyl miticide prepn; nitrogen heterocycle aryltriazapentadienyl miticide prepn; acaricide aryltriazapentadienyl heterocycle

IT Acaricides

(aryltriazapentadienyl arom. nitrogen heterocycles)

IT 3100-93-4 60515-59-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(addn. reaction of, with amidines)

IT 74-89-5, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with Et formimidates)

IT 78-39-7 115-80-0 123-39-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with amino-substituted nitrogen heterocycles)

IT 109-12-6 533-30-2 578-66-5 580-15-4 695-34-1 823-39-2 823-61-0

1072-97-5 1532-84-9 1603-40-3 1603-41-4 1603-91-4 1824-81-3

2010-06-2 2289-75-0 3512-80-9 4214-74-8 5049-61-6 5339-33-3

5398-36-7 7252-84-8 15583-16-1 30709-67-2 41995-30-6 42753-67-3

42770-14-9 65258-53-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with tri-Et orthoacetate)

IT 96-50-4 136-95-8 504-24-5 504-29-0 1072-98-6 6298-37-9

41995-31-7 62476-56-6 65258-52-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with tri-Et orthoformate)

IT 462-08-8 3430-33-9 6298-19-7 28020-37-3 65259-40-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with N-methylformamide)

IT 7727-37-9D, amine-substituted heterocyclic compds.

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with N-methylformamide and with ortho esters)

IT 33842-45-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with N'-aryl-N-methylformamidine)

IT 65258-54-0P 65258-55-1P 65258-56-2P 65258-57-3P 65258-58-4P

65258-59-5P 65258-60-8P 65258-61-9P 65258-62-0P 65258-63-1P

65258-64-2P 65258-65-3P 65258-66-4P 65258-67-5P 65258-68-6P

65258-69-7P 65258-70-0P 65258-72-2P **65258-73-3P**

65258-74-4P 65258-75-5P 65258-76-6P 65258-77-7P 65258-78-8P

65258-79-9P 65258-80-2P 65258-81-3P 65258-82-4P 65258-83-5P

65258-84-6P 65258-85-7P 65258-86-8P 65258-87-9P 65258-88-0P

65258-89-1P 65258-90-4P 65258-91-5P 65258-92-6P 65258-93-7P

65258-94-8P 65258-95-9P 65258-96-0P 65258-97-1P 65258-98-2P

65259-00-9P 65259-01-0P 65259-02-1P 65259-04-3P 65259-05-4P

65259-06-5P 65259-07-6P 65259-08-7P 65259-09-8P 65259-10-1P

65259-12-3P **65259-13-4P** 65259-15-6P 65259-16-7P

65259-17-8P 65259-18-9P 65259-19-0P 65259-20-3P 65259-21-4P

65259-22-5P 65259-23-6P 65259-24-7P 65259-27-0P 65259-28-1P

65259-29-2P 65259-30-5P 65259-33-8P 65352-70-7P 65531-27-3P

RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)

(manuf. and acaricidal activity of)

IT 16705-92-3P 33842-49-8P 33842-54-5P 41154-10-3P 50501-92-3P

65257-80-9P 65257-81-0P 65257-82-1P 65257-83-2P

RL: PREP (Preparation)

(manuf. and condensation with N'-aryl-N-methylformamidine)

IT 65258-54-0P 65258-55-1P 65258-71-1P 65258-99-3P 65259-03-2P

65259-11-2P 65259-14-5P 65259-25-8P 65259-26-9P  
 65259-31-6P 65259-32-7P 65259-34-9P 65259-35-0P 65259-36-1P  
 65259-37-2P 65259-38-3P 65259-39-4P

RL: PREP (Preparation)

(manuf. of, for use as acaricide)

IT 40319-86-6P 40320-36-3P 65258-18-6P 65258-19-7P 65258-20-0P  
 65258-21-1P 65258-22-2P 65258-23-3P 65258-24-4P 65258-25-5P  
 65258-26-6P 65258-27-7P 65258-28-8P 65258-29-9P 65258-30-2P  
 65258-31-3P 65258-32-4P 65258-33-5P 65258-34-6P 65258-35-7P  
 65258-36-8P 65258-37-9P 65258-38-0P 65258-39-1P 65258-40-4P  
 65258-41-5P 65258-42-6P 65258-43-7P 65258-44-8P 65258-45-9P  
 65258-46-0P 65258-47-1P 65258-48-2P 65258-49-3P 65258-50-6P  
 65258-51-7P 65352-71-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and addn. reaction with aryl isocyanide)

IT 40320-08-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and condensation with aryl isocyanide)

IT 3189-28-4P 26829-67-4P 33842-51-2P 33842-52-3P 33842-53-4P  
 35257-15-9P 41154-05-6P 50501-89-8P 50501-90-1P 65257-84-3P  
 65257-85-4P 65257-86-5P 65257-87-6P 65257-88-7P 65257-89-8P  
 65257-90-1P 65257-91-2P 65257-92-3P 65257-93-4P 65257-94-5P  
 65257-95-6P 65257-96-7P 65257-97-8P 65257-98-9P 65257-99-0P  
 65258-00-6P 65258-01-7P 65258-02-8P 65258-03-9P 65258-04-0P  
 65258-05-1P 65258-06-2P 65258-07-3P 65258-08-4P 65258-09-5P  
 65258-10-8P 65258-11-9P 65258-12-0P 65258-13-1P 65258-14-2P  
 65258-15-3P 65258-16-4P 65258-17-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and condensation with N'-aryl-N-methylformimidine)

IT 40320-08-9P 65259-41-8P 65259-42-9P 65259-43-0P 65259-44-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction with aryl isocyanide)

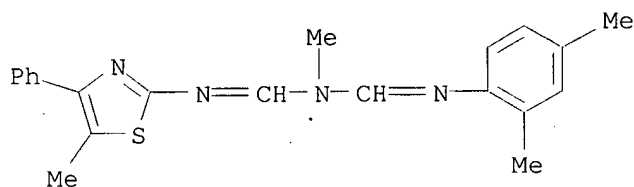
IT 65258-73-3P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)

(manuf. and acaricidal activity of)

RN 65258-73-3 HCAPLUS

CN Methanimidamide, N-[[ (2,4-dimethylphenyl)imino]methyl]-N-methyl-N'-(5-methyl-4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 14:45:24 ON 13 MAR 2003)  
 SET COST OFF

FILE 'HCAPLUS' ENTERED AT 14:45:35 ON 13 MAR 2003  
 E GB99-2592/AP,PRN

L1 1 S E4  
 E WO2000-GB345/AP, PRN  
 L2 1 S E3, E4  
 E WO200046184/PN  
 L3 1 S E3  
 L4 1 S L1-L3  
 E CHARLES, M  
 E CHARLES M/AU  
 L5 59 S E3, E9, E29  
 E FRANKE W/AU  
 L6 264 S E3-E11, E25, E26  
 E GREEN D/AU  
 L7 349 S E3, E8-E10  
 E GREEN DAVE/AU  
 L8 254 S E4, E16-E19  
 E HOUGH T/AU  
 L9 23 S E3, E4, E11, E13, E14  
 E MITCHELL D/AU  
 L10 182 S E3, E19-E21  
 L11 7 S E30-E32  
 E SIMPSON D/AU  
 L12 124 S E3, E14  
 E SIMPSON DON/AU  
 L13 13 S E4, E8, E9  
 E ATHERALL J/AU  
 L14 3 S E4, E5  
 E AVEBTUS.OAMCS  
 E AVENTIS/PA, CS  
 L15 1597 S AVENTIS?/PA, CS  
 L16 1 S L4 AND L5-L15  
 SEL RN

FILE 'REGISTRY' ENTERED AT 14:50:24 ON 13 MAR 2003

L17 448 S E1-E448  
 L18 106 S L17 NOT METHANIMIDAMIDE  
 L19 STR  
 L20 SCR 1839  
 L21 50 S L19 AND L20  
 L22 30727 S L19 AND L20 FUL  
 SAV TEMP L22 QAZI890/A  
 L23 STR L19  
 L24 383 S L17 AND L22  
 L25 65 S L17 NOT L24  
 L26 48 S L25 AND NR>=2  
 L27 23 S L26 NOT METHANIMIDAMIDE  
 L28 3 S L27 AND (C22H30N2O OR C21H28N2O OR C20H22N4OS)  
 L29 25 S L26 NOT L27  
 L30 411 S L24, L28, L29  
 L31 37 S L17 NOT L30  
 SAV TEMP L30 QAZI890A/A

FILE 'HCAPLUS' ENTERED AT 15:12:16 ON 13 MAR 2003

L32 1 S L30

FILE 'USPATFULL, USPAT2' ENTERED AT 15:12:35 ON 13 MAR 2003

L33 0 S L30

FILE 'REGISTRY' ENTERED AT 15:12:44 ON 13 MAR 2003

L34 30344 S L22 NOT L17  
 L35 STR L23  
 L36 50 S L35 SAM SUB=L34

FILE 'HCAPLUS' ENTERED AT 15:16:35 ON 13 MAR 2003

L37 2642 S L34  
 L38 2419 S L37 AND (PD<=20000204 OR PRD<=20000204 OR AD<=20000204)  
 L39 374 S L37 (L) AGR/RL AND L38  
 L40 1076 S L37 AND AGRO?/SC,SX AND L38  
 E FUNGICIDE/CT  
 L41 194 S E17 AND L38  
 E E5+ALL  
 L42 130 S E8+NT AND L38  
 L43 3749 S (ERYSIPH? OR "E") ( ) GRAMIN? OR TRITICI?  
 E ERYSHIPHE/CT  
 L44 1059 S E25-E32  
 E E25+ALL  
 L45 1059 S E6+NT  
 E E4+ALL  
 L46 2689 S E4+NT  
 L47 23 S L38 AND L43-L46  
 L48 23 S L39,L40 AND L47  
 L49 23 S L40 AND L47  
 L50 23 S L48,L49  
 L51 13 S L50 NOT MIX?  
 L52 10 S L50 NOT L51  
 L53 5 S L52 NOT SYNERG?  
 L54 13 S L51 NOT SYNERG?  
 L55 18 S L53,L54  
 L56 868 S L38 AND P/DT  
 L57 502 S L56 AND L39-L46  
 L58 278 S L57 NOT (SYNERG? OR MIX?)  
 L59 272 S L58 NOT GENET?/SC,SX  
 L60 140 S L59 AND (US/PC OR US/PRC OR US/AC)  
 L61 130 S L60 AND US/PC  
 L62 25 S L60 AND L41,L42  
 L63 23 S L62 AND 5/SC,SX  
 L64 41 S L55,L63 AND L37-L63  
 L65 28 S L64 AND P/DT  
 L66 13 S L64 NOT L65  
 L67 40 S BENZEN?/SC,SX AND L56  
 L68 15 S L67 AND L39-L46  
 L69 1076 S L38 AND 5/SC,SX  
 L70 205 S L39,L40,L69 AND L41-L46  
 L71 131 S L70 NOT (SYNERG? OR MIX?)  
 L72 131 S L71 NOT GENET?/SC,SX  
 L73 49 S L72 AND P/DT  
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 15:30:19 ON 13 MAR 2003

L74 723 S E1-E723  
 L75 4278 S L35 FUL SUB=L34  
 SAV L75 QAZI890B/A  
 L76 0 S L74 AND L75

FILE 'HCAPLUS' ENTERED AT 15:33:37 ON 13 MAR 2003

L77 200 S L75  
 L78 169 S L77 AND (PD<=20000204 OR AD<=20000204 OR AD<=20000204)  
 L79 50 S L78 AND AGRO?/SC,SX  
 L80 43 S L75 (L) AGR/RL  
 L81 41 S L78 AND L80  
 L82 0 S L78 AND L43-L46  
 L83 1 S L78 AND ?FUNG?  
 L84 43 S L80,L81  
 L85 42 S L84 NOT (PHARMACOL? OR PHARMACEUT?)/SC,SX  
 SEL HIT RN  
 DEL SEL  
 SEL HIT RN



L86 FILE 'REGISTRY' ENTERED AT 15:36:12 ON 13 MAR 2003  
605 S E1-E605

FILE 'REGISTRY' ENTERED AT 15:38:13 ON 13 MAR 2003

L87 FILE 'HCAPLUS' ENTERED AT 15:38:22 ON 13 MAR 2003  
1 S L32 AND L1-L16

FILE 'REGISTRY' ENTERED AT 15:38:58 ON 13 MAR 2003

L88 FILE 'HCAPLUS' ENTERED AT 15:39:33 ON 13 MAR 2003  
2 S L77 AND L1-L16  
L89 15 S L37 AND L1-L16  
L90 15 S L88,L89  
L91 10 S L90 NOT MIX?  
L92 10 S L88,L91  
L93 7 S L92 AND (AGR?/SC,SX OR L41-L46)  
L94 3 S L92 NOT L93  
L95 10 S L93,L94  
L96 10 S L95 AND L38  
L97 32 S L85 NOT (SYNERG? OR MIX?)